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How to Foster Alternatives To Helpless Obedience at the Massachusetts Institute of Technology

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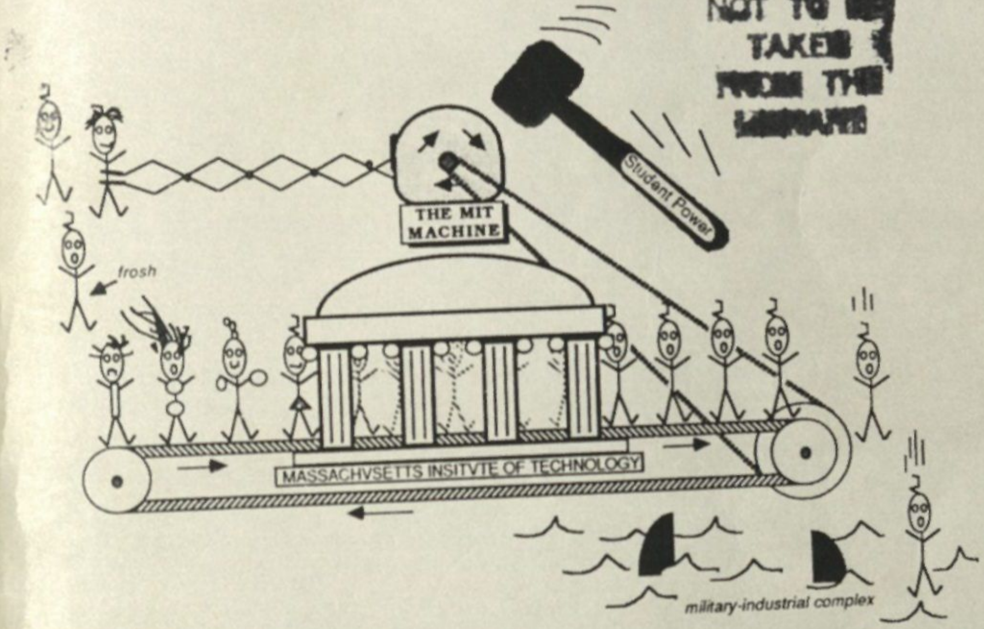
THE MIT MACHINE
Student Power
frosh
MASSACHVSETTS INSITVTE OF TECHNOLOGY
military-industrial complex

MIT
*DIS*ORIENTATION MANUAL
1988-9

MIT Science Action Coordinating Committee • MIT Alternative News Collective

How To FATHOMIT:

MIT *DIS*ORIENTATION MANUAL – 1988

How to Foster Alternatives To Helpless Obedience at the Massachusetts Institute of Technology

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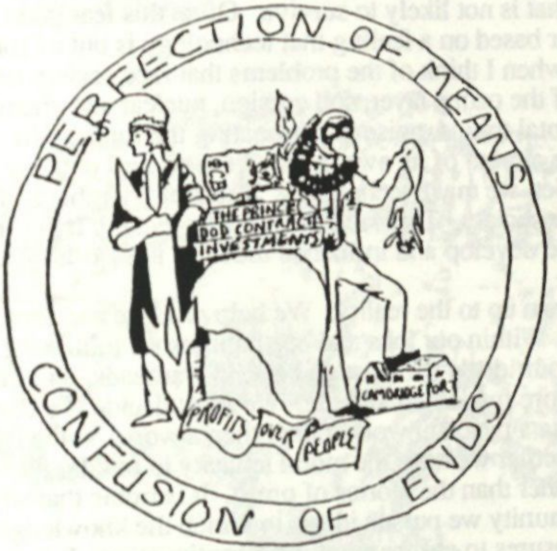
PERFECTION OF MEANS
THE PRINCE
DOD CONTRACTS
INVESTMENTS
CAMBRIDGE PORT
PROFITS OVER PEOPLE
CONFUSION OF ENDS

Produced at the Massachusetts Institute of Technology by the Science Action Coordinating Committee and Alternative News Collective.

This manual contains contributions from over a dozen people, some of which are anonymous.

Second edition, November 1988. Edited by: Rich Cowan, Ron Francis, Caroline Jean Lee, Liz Highleyman, Cara Starr-Palmer, Steve Penn, Michelle Sprengnether, Kathy Stockton.

Suggested Price: $1.00 for new students and $1.50 for others. Off campus, send $3 for one copy, $5 for two, and $10 for five to the Alternative News Collective, Rm. 26-567, MIT, Cambridge MA 02139 (include address). On campus, call x3-1521 or SACC at 738-5624.

****Please buy extra copies and help distribute the manual as widely as possible****

Section I: Introduction to MIT

Why Be Active?

by Steve Farber

Many people are scared. They are scared that scientific progress is creating a world that is not likely to survive. Often this fear goes beyond nuclear war. It is a fear based on a feeling that technology is out of control. I am often overwhelmed when I think of the problems that face society today; acid rain, deterioration of the ozone layer, soil erosion, nuclear and chemical waste build-up, environmental toxins, poisons permeating the food chain... Technology appears to have a mind of its own, beyond the control of the most well meaning humans. Yet, we make technology. Technology reflects the values and priorities of our society. This relationship is especially true for people at, or from, MIT. We develop and influence much of the world's technology.

We must own up to the reality. We help produce and reproduce this crazy looking world. Within our jobs and our families we mimic the greater society. To restructure our ideals we must go beyond warheads, pollution and hunger to confront a more fundamental issue. We must decide whether we have the courage to create a peaceful world rather than a world on the brink of destruction — whether we have the moral tenacity to build a future based on the ethics of life rather than the glories of profit. It is ironic that while in the technological community we pursue ideals to enrich the knowledge of humankind, we take no measures to ensure mankind's continuation. It is the lead in our hearts, not the uranium in our missiles, that is so frightening.

At this moment you may feel attacked. "Don't lay all this on me. I don't like the way things are, but I'm powerless." First understand that we are all frightened. These issues threaten our existence. This situation is unpleasant, but turning away will not make the problems vanish. By facing these issues together we are united in our desire to effect positive change.

So what do we do? The most important thing is to ask more questions. Is the very search for answers at the root of the problem? Although many people think and act otherwise, activism is not about answers. I see it as a chance to engage with others in a questioning process. Like a sculptor, the questioner

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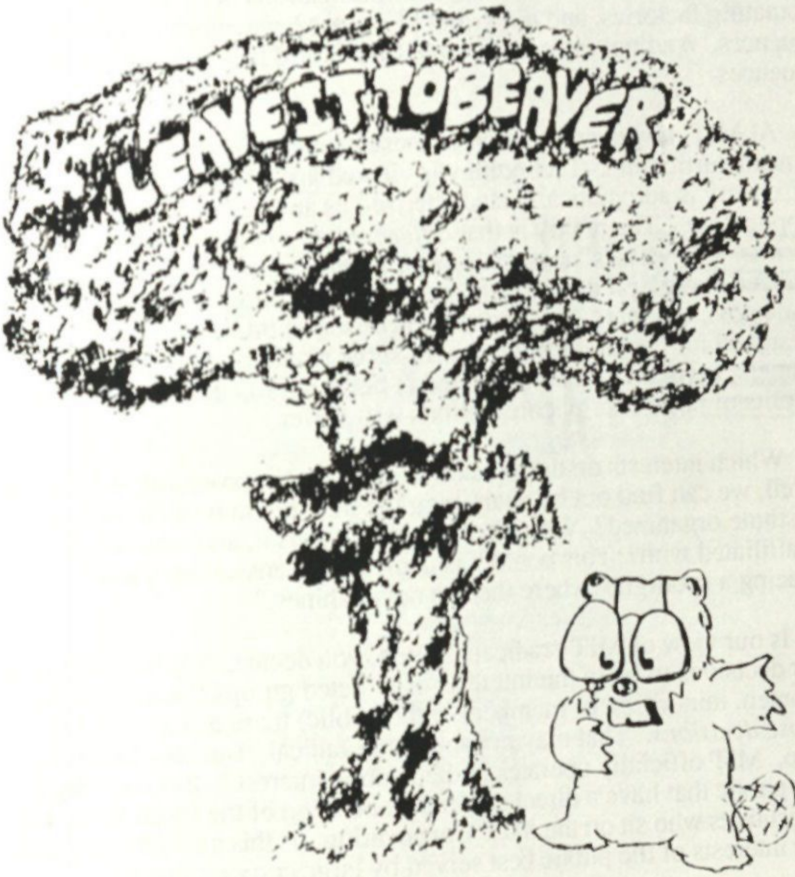
chips away at an issue, often exposing viewpoints or contradictions that had previously gone unnoticed by those who have the "answers."

If we ask, "How do I support the present ills in the world?," we might see areas where changing our behavior will improve the society. But you can't sit in your room and be an activist. To make change we have to come together, question together and act together.

To work for change requires courage. Raising questions is not easy, especially in a world committed to answers. But by engaging people in this questioning process, we expose countless contradictions that force us to rethink our assumptions and priorities. We cannot eliminate the problems facing the world overnight, but we can transform ourselves from passive victims into agents of change.



A Message to Incoming Students

From the MIT Alternative News Collective

During orientation, you get a sense that MIT is a "neat" place made up of lots of smart people dedicated to learning more about technology. The picture is simple, neat, and uncontroversial. We invent, society benefits, and Everybody's Happy. Unfortunately, this view is superficial. It ignores the central question to understanding MIT: *what kinds of technologies are we learning about, and why?*

This question is controversial because many people are simultaneously trying to pull technology in vastly different directions. They represent corporations, labor unions, the military, environmental organizations, local governments, and public interest groups — all of whom realize that in our society, control of technology means control of power. Our methods of generating energy, organizing databases and communications networks, growing food, automating factories, and disposing of wastes have enormous political consequences. And not everyone in the Real World is happy with these consequences.

At MIT, however, mention of these problems is censored from the mainstream curriculum. Technology is viewed apolitically. Any new technological discovery is automatically characterized as an "advance," no matter what the application. The reality is that *different types of discoveries serve different interests*. "Advances" in nuclear power have served the owners of large, centralized energy producers (who received huge subsidies from the federal and state governments). "Advances" in conservation, wind, and solar energy, if designed for decentralized use, will serve smaller power producers, consumers, taxpayers (subsidies needn't be so huge), and the environment. The profits of large energy corporations will suffer.

Which interests do the education and research programs at MIT serve? Well, we can find out by examining the Institute in more detail. How is the Institute organized? Who directs it, who funds it, and what other institutions is it affiliated with? This booklet is dedicated to answering these questions — to placing a spotlight "where the sun never shines."

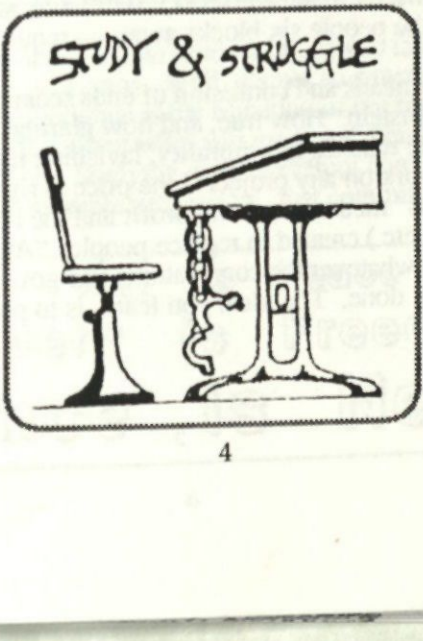
Is our view of MIT "radical?" Well, you decide. We believe that in order for decisions to be in the interests of affected groups (faculty, students, women, minorities, or members of the public) these groups *must participate in those decisions*. That may not sound too radical. But compare it to the status quo. MIT officially operates in the "public interest." But the only members of the public that have a direct say in the operation of the Institute are corporate executives who sit on the **MIT Corporation**. Is this a conflict of interest, or are the interests of the public best served by large corporations?

The groups that produced this guide all advocate greater participation by students, faculty, staff, and members of the public in decision making at MIT. We are concerned that these groups have little or no say today. Sometimes, we will *demand* that changes be made. Thinking globally, but acting locally, we recognize that a more democratic, more humanistic MIT will be needed to produce a more humane and equitable technological society.

As scientists and engineers concerned about our responsibility to the world, we must be aware of who has determined the directions of our technology. We hope that you will read this booklet, and most importantly, talk about the issues it raises with people you meet in your living group, your classes, and your activities. MIT students are often wimps when it comes to questioning authority, and we must break down this fear first if we are to change anything.

In talking to people — upperclassmen especially — you are likely to encounter cynicism or anger, and you may feel isolated. "Why don't you go somewhere else if you don't like it?" you may hear. Don't be put off. Critical thinking is an essential element of your education, although professors sometimes send you the message that it's a distraction from what you *have to learn.* Enjoy your pass/fail opportunity. Remember that the equations you learn at the college level are useful mainly for your technical vocation. Learning to think critically will enrich your entire life.

The best way to avoid isolation, of course, is to get involved with some of the organizations listed in the back of this booklet or start your own. The groups provide a support network for students who want to channel some of their energies for social change. Organizing may seem difficult at an institution like MIT which, as we show, is in the "belly of the beast." But the global importance of MIT gives us an opportunity to have an even larger effect: if we create an alternative community which has a lasting impact on this institution, the effects of our actions will be felt far beyond the campus.



THE NEW YOU

by Cara

You are at the Main Entrance. Over the door it says MASSACHVSETTS INSTITVTE OF TECHNOLOGY, in concrete. Everywhere is concrete. Concrete pillars, concrete corridors, concrete stairs, enormous concrete buildings, everything hooked together and sprawling for blocks and blocks in all directions, all in concrete. Upperclassmen scuffle past, their faces impassively glazed. (Are they thinking Great Thoughts...or just completely fried, you wonder.) You feel small and out of sorts.

"Why am I here?," you ask yourself. Then you remember. You came to study humankind's mastery of nature, the accumulated understanding of the wielding and invention of our species' tools, everything scientists have come to understand about the principles and processes of useful implements from the stone hammer to the laser beam. And all that. And to get rich. And to maybe win a Nobel Prize, or something. "Can I make it?" you wonder. Can I really make the grade? Can MIT make me into a scientist, a researcher, an Expert? Can MIT make me into a Success?

Welcome to MIT, friend. During the next few weeks you'll be wondering about a lot, asking a lot of questions. The most important question you could possibly ask, however — and ask repeatedly throughout your MIT career — is not what the Institute can do for you, but what the Institute is going to do TO you during the next four years. After all, where else but at MIT do they get people (— you—) to work for them who are simultaneously intelligent and informed enough to understand about diodes, leptons, DNA, and Godel's Theorem, critical and creative enough to devise new processes, invent novel objects, and solve unprecedented problems, AND YET who are sheepish, obedient, and bewildered enough to work hard on whatever they're told, just the way they're told to work on it, without raising any insolent questions about what it's for, who needs it, what effects it will have, and whether it's what the world — or even the people six blocks away — require right now.

"Perfection of means and confusion of ends seem to characterize our age," lamented Albert Einstein. How true, and how glaringly obvious at MIT. Indeed, the Institute relishes this morality, lavishing it upon students and professors who will work on any project if the price is right. "Science is neutral," they say. "Progress" means corporate profit and the number of structures (buildings, bombs, etc.) created to replace people. "Academic freedom" is a carte blanche to do whatever the corporations and government (military-industrial complex) want done. The idea, you learn, is to produce.

How does this happen? MIT strikes early while the individual is still helpless. Notice how they are orienting you: The hype you are getting is not the benevolent guidance of loving parents — not the sanctimonious *in loco parentis* the INSTITVTE talks about. It is a comprehensive orientation designed to get you to work for it and calculated to become self-perpetuating by the time you graduate. Follow Our Way, the Institute reassures. Put yourself in our (cold, technological) hands, and you will be all right. Forget the old you: MIT is going to give you a New You.

In no time, you will come to think of yourself as not merely studying or mastering but as tooling, as being a "tool" — your own soul becomes the first soundless complex mechanism you learn to keep humming ever more efficiently, and do anything and everything to keep from breaking down. The rest of the New You metamorphoses when you absorb MIT's dedication to the proposition that every problem has only one answer. Your individual point of view only crops up as a source of error, a style of eccentricity, or a cause of general embarrassment. After all, you are now part of The School.

As you struggle along in your studies, tooling away frantically, you will notice your world becoming ever narrower. The Institute, with magnanimous impartiality, is funneling you into a "specialty," giving you the opportunity to develop the most magnificent one-track mind your family and friends have ever seen. In the summer, you may be given the opportunity to work for a corporation or the government. This will be called "Preparing You for the Job Market." Amazingly, you will notice, the parameters of your specialty fit right in with "industry demands." Somehow, you find, you have just the skills and knowledge the government contractor needs in order to stabilize its helicopters to shoot down more people more accurately in less time, and for lower cost per dead person. Having gone to MIT, you get to work on the cutting edge of technology: your systems will continue to function even after the rest of civilization is slaughtered by nuclear war. You do the best job in the business, whether it's EECS, MechE, materials, optics, nuclear, or bio warfare.

WHOA! Hold it! Just a minute here; what are you talking about? I am just going to study science, you gasp. Well, it's not so simple, friend. "Knowledge without conscience is the ruination of the soul." — Francois Rabelais. Think carefully about what you read, and then take responsibility for yourself and your actions. Studying at the forefront here at MIT, you can make science into an honorable profession. Just commit yourself to doing so.

War is Peace
Slavery is Freedom
Science is Neutral

PEOPLE AND PLACES AROUND MIT THAT YOU SHOULD KNOW

by Seth Tuler and Rich Cowan

As you spend more time at MIT and as you become more aware of the various issues affecting the MIT community, you will often hear about a few key members of the MIT administration and facilities affiliated with MIT. Some of them you no doubt have already heard of and maybe spoken to. It is the intention of this section to describe who they are, what they say, and what they do. Because most people at MIT are only here for a relatively short period it is important to provide a little history for context. Without some background information, many things at MIT and many of the actions of our groups may seem confusing or contradictory. We hope that this information will help you in understanding what is really going on.

People

While we have no intention of making personal attacks on individuals, we do feel it is important that factual information about key links be known — if it might have an effect on MIT policy. Administration figures represent MIT's position on many issues and set the tone for debate internally. Yet the connections they may have can limit the views they feel comfortable expressing. This may stifle political debate on campus, preventing the interests of the larger MIT community from being considered in the formulation of policy. An example of this is the administration's continued lobbying efforts for increased federal funding for military research when most faculty surveyed think the increases have already gone too far.[1]

The administration's failure to acknowledge these connections constitutes a hidden and improper influence on the university decision making process. All the cards should be placed on the table: connections which may reveal conflicts of interest must be revealed. These not only include the publicly available information we are presenting here, but also private faculty consulting. Right now, faculty must reveal outside activities, not exceeding 40 days per year, to their department chair. The Faculty Committee on Outside Professional Activities oversees this policy. But the 40-day limit is frequently exceeded, as you will realize when you try to contact faculty who are never around. And the department chairs do not disclose the ties that are reported. What are they afraid of?

We do not ask that all outside connections be eliminated; in today's society, the university does have a role in public service. But too often, MIT's "public service" activities are restricted to solving military problems when other urgent national problems, such as housing and environmental issues, are neglected. In addition, professors and administrators with many outside consultantships often neglect their educational duties.

President Paul E. Gray has held this position since 1980 and has been a member of the MIT Corporation since 1971. Prior to 1971 he was a facutly member of the MIT Department of Electrical Engineering (1960-71). He holds high level positions at several other institutions too: Director, Shawmut National Corporation; Director, New England Mutual Life Insurance Co.; Director, Cabot Corporation; Director, Arthur D. Little, Inc.; Member of the Corporation of the Museum of Science; Trustee, Woods Hole Oceanographic Institute; Chairman of the Board of Trustees, Wheaton College, MA; and former member of the White House Science Council (1982-6).

President Gray believes that the "Department of Defense is an enlightened sponsor of basic research."[2] He promotes MIT as an institution devoted to public service. To Gray, the "operation of Lincoln Laboratory is an appropriate aspect of the Institute's responsibility for public service." He does not see any conflict between the lab's narrow, near-exclusive emphasis on DOD research and public service.

In the commencement address of June 1985 President Gray stated that MIT faculty acceptance of SDI funds in no way was an institutional endorsement of SDI. At the same time the DOD was using MIT's name to secure SDI funding from Congress.[3] President Gray also used his position on the President's Science Advisory Panel to lobby for increased federal funding of military research. When the head of a prestigious academic research institution seeks out the military as the primary source of scientific funding he sets a bad example and participates in the distortion of technological and economic development in America.

President Gray is adamant on the issue of MIT divestment from corporations doing business in South Africa. He has stated that divestment is not appropriate because it is an ineffective tool with which to influence events. In addition, he believes divestment will have a negative effect on the future and social fabric of South Africa. Moreover, as a member of the MIT Corporation he believes that divestment is not a fiduciarily responsible move. In fact, he called the University of California Board of Regents "spineless" for divesting.[4]

Provost John Deutch has held this postition since 1983. He has been actively involved in military related organizations since the early 1970's. They are: Member of the Defense Science Board (DSB) since 1975; Chairman of the 1986 DSB Task Force on Small Intercontinental Ballistic Missiles (The "Midgetman Panel"); Chairman of DSB 1980 Summer Study and 1984-5 Task Force on Chemical Warfare and Biological Defense; Chairman of DSB 1987 Summer Sudy on Technology Base Management; Member of DSB 1982 Task Force on University Responsiveness to National Security Requirements;

Member of the Army Scientific Advisory Panel (1976-78); DSB Consultant to the DOD-University Forum (currently); Member of the Science Advisor's panel on Basic Research in the Department of Defense (1978); Undersecretary of Energy (1979-80); Member of the Scowcroft Commission on MX Missiles (1982-83); Member of the Corporation of Draper Laboratory; Director, MITRE Corporation; Director, Science Applications International; Director, Consumers Power Inc.; Director, Perkin-Elmer Corp.

On DOD research, Deutch said to the *Boston Globe* in 1986 that "there is no mission oriented research on campus."[5] However, many mission-oriented contracts existed on campus at the time, such as Professor George Bekefi's work on free electron lasers, Professor Michael Athans' work on nuclear weapons command and control, and Research Associate James A. Cornie's work on materials for an SDI system.

Chairman of the MIT Corporation Dr. David S. Saxon has held this position since 1983 and has been a member of the Corporation since 1977. Prior to coming to MIT he was a research physicist and faculty member at UCLA and MIT. From 1975-83 he was President of the Universtiy of California, where his office was frequently targeted (and taken over at least once) by protests against the Lawrence Livermore and Berkeley nuclear weapons laboratories. At UC San Diego, he was once mobbed by a coalition of Chicano students and anti-CIA protesters, knocked to the ground, and spat on. He serves as: member of the Research Advisory Committee, Ford Motor Co. (a major defense contractor); Director, Eastman Kodak, Co. (ranked 86 in top 100 DOD contractors for fiscal year 1984); Director, Houghton Mifflin Co.; and, Member, Science Advisor's Panel on Basic Research, Department of Defense (1978).

Dr. Saxon is also a strong supporter of increased military funding at universities. He has stated that "paradoxically, the best guarantee of eventual disarmament is the continued operation of our nation's nuclear weapons laboratories."[6] He dismisses the possibility of any negative effects on the quality of education resulting from university operation of such facilities.

As Chairman of the Corporation, he is strongly against divestment and believes that if MIT divests it will lose both money and the ability to influence corporations' activities in South Africa.

Places

As your education at MIT continues you may find yourself involved in research centered at MIT Lincoln Laboratory or the Charles Stark Draper Laboratory. The research may involve very interesting technical problems that you will be told have many potential or real applications — both civilian and military. According to President Gray Lincoln "lab is an exciting technical place." This is a narrow view of what makes research worthwhile. What is the "big picture" at these laboratories? Many students like to know (and ought to know) who is funding their research and what are their goals. At these laboratories much public relations is devoted to explaining the many civilian applications of their research. However, the history and funding context of these laboratories tell a different story.

Lincoln Laboratory is located 20 miles from campus at Hanscom Air Force Base near Lexington, MA. It is owned by the US Air Force as a Federal Contract Research Center and operated by MIT.

Its initial task was to develop some of the concepts and components of an integrated Continental Air Defense System. Before agreeing to establish such a facility, MIT requested a study by a committee of civilian and military personnel to assess the problem of establishing such a facility at a university and the projects required. The final report of "Project Charles" was submitted in 1951 and the Laboratory was established.[7] Its current director is Professor Walter E. Morrow, Department of Electrical Engineering, MIT.

Organizational structure and decision making at Lincoln Laboratory are tightly connected to the MIT administration, which manages the facility. The Director of the Laboratory is appointed by the MIT President and reports to the Provost. Fiscal responsibility resides at MIT and the Office of Sponsored Research oversees contracts and negotiations. The MIT administration has also participated with Lincoln in negotiations with the DOD.[8] President Gray and Provost Deutch have appointed a Lincoln Advisory Board consisting of 12 members from other universities and industry "to advise the MIT Administration on the quality of Lincoln Laboratory programs and on other matters relating to the Laboratory that may be of interest to the Administration. To advise the Laboratory on new research directions and national research needs."[9]

The MIT administration insists that its DOD funding is separate from on-campus DOD funding because MIT does not own the facility. However, because MIT runs Lincoln there are restrictions on the kinds of work that can be done there — no actual weapons can be built there. Although much emphasis is given to Lincoln's non-military work, 97% of its $354 million budget (1987) comes from the Department of Defense.[10] About 25% goes to SDI research. Dr. M. Herlin, assistant to the Director, has said that "We work on the [satellite] sensors that tell us what's up there; we don't work on the side that shoots them down."[11] This attitude avoids the fact that the radar technology ends up in various weapon systems.

For MIT a large benefit of managing the lab is Lincoln's financial contribution to the campus. In fiscal 1985 Lincoln provided $13.5 million —

million in support for graduate assistants' tuition and $7.9 million for support services on campus, according to the MIT administration.[12]

Members of the MIT community have always been skeptical of the relationship between MIT and Lincoln, and as a result various panels have been established to study the relationship. When the anti-war movement spread to MIT, students in the Science Action Coordinating Committee and Rosa Luxembourg SDS protested the relationship, sparking the creation of the Review Panel on the Special Laboratories (Pounds Panel) in 1969.[13] However, the Corporation endorsed the Panel's recommendations to initiate more non-military research at Lincoln and to promote closer ties between the Lincoln and MIT communities.

Such goals have proved elusive because of the laboratory's relationship to the US Air Force. Very little change has occurred. In the last several years, as military spending soared, the civilian research budget of Lincoln has shrunk. As a result of a growing dependency on military funding at MIT, renewed interest has appeared over the relationship of MIT and Lincoln in the last few years. Yet another committee, the Lincoln Laboratory Review Committee, published its report (the "Smullin Report") in 1986. It concluded that the work at Lincoln does not violate MIT's ban on operational weapons systems research, but that some projects come close to doing so.[14]

Lincoln Laboratory has developed an outstanding reputation and become a center for research and development in advanced electronics. The emphasis has been on the areas of satellite communications, radar technologies, optics, computer systems and digital signal processing, space surveillance and air traffic control. However, much of Lincoln's work is classified. It conducts laser weapons feasibility studies, operates a testing range for ballistic missiles in the Pacific, and is developing MILSTAR and NAVSTAR, which are to be used to guide Trident II missiles.

Another question about the effect of Lincoln on MIT is whether its presence steers campus research toward military needs. This funding can create distortions in educational opportunities. Military-funded technology emphasizes performance characteristics over usefulness to human beings. Therefore, designs coming out of research centers like Lincoln Laboratory (as well as several on-campus centers) are unlikely to be commercially viable or socially useful. Moreover, they can distort the kinds of courses and research opportunities available to students.

Charles Stark Draper Laboratory is a huge military facility which develops guidance systems, located just behind the MIT campus in Technology Square. The Lab was founded in 1930 as the Instrumentation Laboratory of the Department of Aeronautics by the late Professor Charles Stark Draper.

The Lab exploded in size during World War II when Draper devloped a gyroscopic gunsight for anti-aircraft fire aboard ships. After the war, the Lab developed the first inertial guidance systems for airplane and ballistic missiles. In the 1960's the Lab developed the technology for the MIRV program which directly led to an escalation of the arms race. In the late 60's the lab developed an all-weather guidance system for helicopters and VTOL (vertical take off and landing planes) which had immediate applications in counter insurgency fighting in Vietnam.[15] Although today such technology has some uses in commercial craft, its immediate applications corresponded directly to Vietnam War needs.

Activities at both Lincoln and Draper were reviewed by the Pounds Panel in 1969. In May, the Panel recommended discontinuing research on "operational weapons systems" at the laboratories and to establish a review committee to determine the acceptability of different projects. But the Executive Committee vowed to honor existing contracts, leading to a massive "November Action" demonstration against war research in which students held MIT in a state of siege. MIT rejected the demand that weapons projects be terminated and converted to non-military research. Instead, in the spring of 1970, MIT President Howard Johnson announced MIT's divestment of Draper Lab, which was most vulnerable to student protests. Lincoln Lab would be retained.[16]

Divestment was formalized in 1973 and a new building was built in Technology Square in 1974. Currently, many students participate in research at Draper Lab and the Lab's employees have access to MIT facilities.

Draper Lab is run by a board of trustees called the Draper Corporation, many of whose members have interlocks with the boards of major defense contractors and MIT, or serve on military or Congressional advisory panels (for example, the Defense Science Board and DOE High Energy Physics Advisory Committee).[17]

Not all of Draper Lab's work has been directly in the "defense" area. In the 1960's Draper devoted much effort to the Apollo program for NASA. Later it initiated work in the areas of transportation planning and a computer safety system for nuclear reactors. However, by 1982, Draper Lab had become Cambridge's largest military contractor with 75% of its $114 million budget (1982) supplied by the DOD.[18] And in the five years since, Draper's budget has tripled as a result of US plans to acquire a nuclear first-strike capability, and Draper technicians have admitted that actual production of Trident II missile parts occurs at the facility in Technology Square.

"I make them go up, but where they come down is not my department, said Werner von Braun."

– folksinger Tom Lehrer, referring to the famous Nazi rocket scientist.

LIMITATIONS OF TRADITIONAL POLITICAL GROUPS

by Rich Cowan

Few MIT students oppose the idea of getting involved in organizations which try to positively influence our society. The agreement ends, however, when you try to define what you mean by "positive influence" and what methods you use to change things.

On one hand, there are progressive groups, such as SACC, People Against Racism, Pro-Femina, or the MIT Alternative News Collective, whose members recognize a need for fundamental change, both at MIT and in society. Thousands of MIT students have attended their events or read their flyers and newspapers. Few get involved. Reasons include the universal ones (lack of time, missed the first meeting, organizational snafus, etc.) as well as the reasons specific to the nature of these groups.

Sometimes the activists are viewed as too negative or "unpragmatic", taking on too many issues, overstating the problems, and distancing themselves from the mainstream. Some of these criticisms (such as being too negative or absorbed in an issue) are valid. But one must act differently from the mainstream — and voice currently unpopular ideas — in order to create real change that addresses *root causes.* Let's compare this to other groups, like the Undergraduate student government (UA) and the MIT Democrats.

The UA, despite its goals, leaves much to be desired when it comes to representing student interests. Dependent on the MIT administration for all its funding, the UA relinquishes considerable control over its own agenda. In bargaining with the administration, the UA President may make concessions to MIT without the approval of other students. For example, during the Spring 1987 Humanities reforms, UAP Manuel Rodriguez negotiated some superficial changes. But he failed to challenge the overall direction of the change — the elimination of innovative subjects — even though 1500 students signed a petition questioning the move. The administration does not try to include students as equal players in decisions. The UA has even given up the right to select student representatives on faculty committees. The final selections are made by the committee chair from a Nominations Committee preference list.

The Democrats, like the UA, have their agenda set from the top-down by the national Democratic Party. Even worse, the issues discussed are restricted to national policy questions, leaving out the many local issues that an MIT student group could directly affect. The only direct effect an involved student can see is the influencing of election results in a local ward or precinct.

Proponents of electoral work fail to realize that installing a new elected official makes little difference. Politicians fill slots in a system that is controlled, for the most part, by economic interests which exert power through their investment decisions. Political arguments that challenge economic forces are censored by the mainstream media (which is owned by big business) and excluded by the two-party system. The widespread public disenchantment with elections and voting is not without good reason.

Traditional political organizations also cut off the more personal side of politics. Sexism, racism, heterosexism, and militarism cannot be fought merely with position papers and legislation. Real political change requires that individuals challenge their own attitudes towards women, people of color, gays, and dealing with conflict. Hence the slogan during the feminist movement of the 70's, "The personal is political."

But personal politics should come from the individual, rather than attempt to mold the individual to the group's philosophy. The latter is the approach of CARP (Collegiate Association for Research of Principles), an offshoot of the Unification Church, founded by the evangelist Rev. Sun Myung Moon. 'Moonie' organizations have a long history of feeding information on activists to the FBI. Lawrence Villiox, of the New York office of the Cult Awareness Network, was quoted in the *Boston Globe* as saying that "if CARP is permitted to set up on campus, campus authorities 'should be prepared for them to be spying for the FBI'"[19]

In general, one must be wary of student groups that are part of a national organization which exercises control over local programs. In these groups, one must always reconcile one's own beliefs with those of the central leadership. This may involve unpleasant compromises. In cults and some Marxist groups, this may mean supporting authoritarian leadership. For Student Pugwash, this may mean refraining from action when the group is ready to act. For Democrats, it may mean giving support to the hawkish stands that candidate Michael Dukakis took on issues like Star Wars after he was pressured by the national security establishment. Are these compromises necessary or can you be just as effective without them?

Progressives measure effectiveness by the long-term change in attitutdes, not by how many people immediately agree. Although their strategies and tactics may seem unusual, they actually follow a longstanding grassroots political tradition. They recognize the limitations of the process used by mainstream groups. To just ask "authorities" to make small reforms creates the illusion that only the authorities can change things. But we can change our attitudes and lifestyles. We can design, implement, and enforce our own policies. We can resist. We must start locally by encouraging personal empowerment and political development, democratic and participatory decision making, direct action, and non-violent civil disobedience.[20] Sound interesting? Then join us!

The UROP TRAP

by a former UROP student

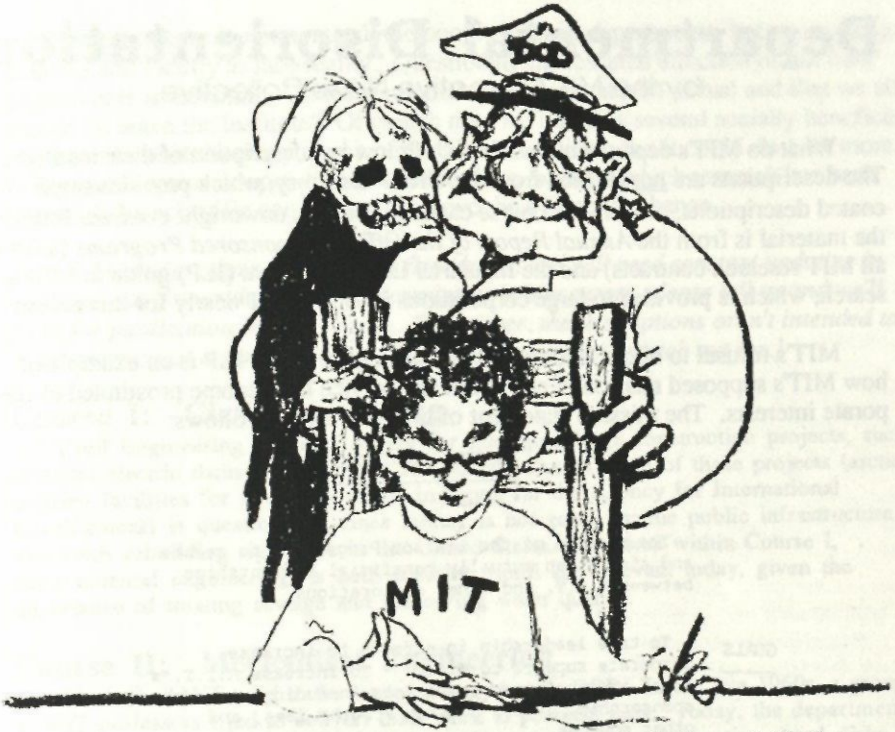
As a freshperson, you must think that many months will pass before you adjust to MIT. But before you know it, you will memorize the building numbers, learn to live with your roommate(s), and be encouraged repeatedly to participate in the Undergraduate Research Opportunities Program (UROP).

What is UROP? The program allows undergraduates to participate in advanced research and meet faculty on a one-on-one basis — opportunities you might not otherwise have access to until graduate school.

But opportunity is a two-way street. Although UROP experience is useful if you choose to go on in the same field, it provides only a minor jump on non-UROPers. Professors may regard you as cheap but dependable labor for their scientific drudge work. Channeling is the key to UROP. The program was set up by founder Margaret MacVicar to funnel you into the fields that industry demands most. This process proved so successful that MacVicar was vaulted onto the boards of several large corporations (Exxon, Cabot, Draper) and became Dean for Undergraduate Education, even though she was denied tenure by the physics department. UROP is advertised as a mentor/pupil relationship with the wise professor as the guiding light. Unfortunately, professors often encourage passive obedience instead of critical thought. Unaware of the existence of research contracts, students can't begin to independently question the political motivations of the sponsor or the social context of their work.

What advice can we offer? *Don't be awed by your professor*. Do not let his or her ability to demonstrate superior technical knowledge command your unconditional acceptance of *everything* he or she suggests. Learning is fostered by questioning. Question your professor. Many UROP professors here do mission oriented research for some branch of the military. Does yours? Ask who funds the research and what purpose it will serve. If your professor hedges around that question by saying that the work has many vague practical applications, press on. Find out where the money comes from and what the sponsor will do with the results. If you don't agree with the ethics, find a new UROP. Don't be afraid to ask these questions. Any professor who would treat you poorly or write you a bad recommendation for wanting to understand the goals or funding of your research is not worth working for.

Unfortunately, you cannot find out about UROP funding and objectives from the UROP manual. (Try the Office of Sponsored Programs directory, described on page 78 of this booklet, or ask someone in the Science Action Coordinating Committee.) The manual contains numerous euphemisms. For example, "understanding coherent radiation generation by free electrons"



(1988 UROP manual p. 142) is funded by the Strategic Defense Initiative. Sarah Tasker, a former UROP student, gained national attention when she quit her UROP with the free electron laser group after she learned that this exciting physics was being used to design laser weapons. "People in the lab were starting to talk about making really high-powered devices to attract military interest... The only reason for making very high powered lasers is to blow holes in something," she concluded.[21]

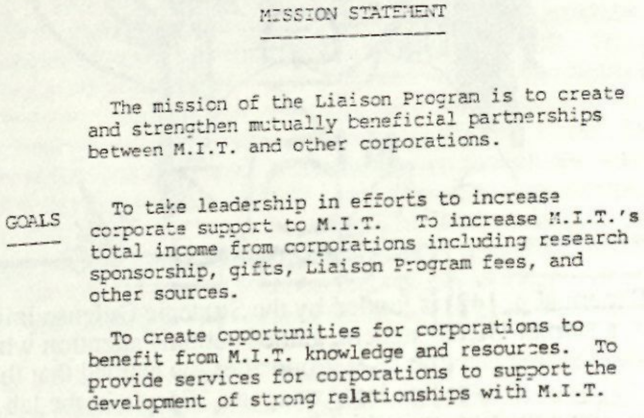
Of course, there are many good UROP experiences out there, though you may have to do some legwork to find one. If you need the money, UROP is a fairly good way to earn some. But the attitude that you have to jump into a UROP, even if the research doesn't excite you, is misguided. One of the most heavily used arguments for getting a UROP is that you will need it to help you land a job. While this may be true in the first two years of MIT, you can easily gain enough experience by your junior year so that a UROP is unnecessary. As an MIT graduate, you will be regarded as the "cream of the crop" even if you don't have a 5.0 or 4.5 GPA. If you want to use your free time for personal reflection or socializing, don't feel guilty. Both are important if you are to become a great scientist. Plan your time carefully. Don't fall into the UROP trap.

Departmental Disorientation

by the MIT Alternative News Collective

What do MIT's departments *really* do? Below is a description of their research. The descriptions are not gleaned from the UROP directory, which provides sugar-coated descriptions, or from the course catalog, which is downright evasive. Rather, the material is from the *Annual Report of the Office of Sponsored Programs* (a list of all MIT research contracts) and the Industrial Liason Program (ILP) guide to MIT research, which is provided to large corporations who pay MIT dearly for this access.

MIT's refusal to allow labor unions to participate in the ILP is an example of how MIT's supposed mission of education and service has become prostituted to corporate interests. The mission statement of the ILP reads as follows:



MISSION STATEMENT

The mission of the Liaison Program is to create and strengthen mutually beneficial partnerships between M.I.T. and other corporations.

GOALS

To take leadership in efforts to increase corporate support to M.I.T. To increase M.I.T.'s total income from corporations including research sponsorship, gifts, Liaison Program fees, and other sources.

To create opportunities for corporations to benefit from M.I.T. knowledge and resources. To provide services for corporations to support the development of strong relationships with M.I.T.

The fact that "other corporations" get the real scoop on MIT technology while students are often mystified should provide some insight into the nature of MIT technology. MIT emphasizes narrow technical areas which are useless by themselves. Their practical uses can be observed only when they are combined with other specialized disciplines within a large industrial or military organization.[22] Highly compartmentalized technology cannot be used by companies and individuals without formidable financial resources. In this sense, it is elite technology.

Putting it all together

The descriptions which follow are intentionally non-technical, where possible. To merely describe the engineering techniques would not say anything about how they are put together with other techniques into *end uses*. Although most MIT research (even if it is "basic") has a specific intended end use, not every MIT professor knows what that use is. This knowledge is essential if we are to exercise our responsibility to be aware of the social and environmental consequences of our work.

The point here is not to attack the people in these departments, but to encourage students and faculty to face reality. Questioning the research direction of our own departments is essential. Do we mean that all research at MIT is bad and that we all should all leave the Institute? Of course not. MIT studies several socially beneficial applications of technology, some of which we mention. But it could do a lot more. Unless we create a campus consciousness of the extent to which research has been distorted, the scientific community can never be a force for change.

[Note: These descriptions are rough first drafts, and will need constant updating in any case. So if your department's description is inaccurate, please tell us and we'll fix it, for publication in The Thistle. *Remember, the descriptions aren't intended to be complete; just a sampling of projects and directions to watch out for.]*

Course I: Civil Engineering

Civil Engineering prepares people for managing large construction projects, such as hydro-electric dams and oil rigs. The social value of some of these projects (arctic military facilities for the Army, dams in Egypt for the Agency for International Development) is questionable, since money is not going for the public infrastructure that needs rebuilding right here in the United States. One area within Course I, environmental engineering, is both socially useful and relevant today, given the importance of treating sewage and preserving water quality.

Course II: Mechanical Engineering

Mech E at MIT used to be funded mainly by the DOD. In the late 1960s, a group of MIT professors tried to convert their work to peaceful uses. Today, the department has diversified, with research applications like prosthetics, refrigeration, hard disks, superconductivity, space systems, industrial automation, and automotive engines. However, the military still dominates the job market for graduates, and DOD funding is making a resurgence in CAD/CAM, AI, and robotics.

Course III: Materials Science and Engineering

Materials science, the engineering department with the highest percentage of women, is also one of the most politically conservative departments. Several years ago, the Materials Processing Center received a mammoth SDI ("Star Wars") grant in "metal matrix composite" space structures designed to make Reagan's vision of an impenetrable missile shield "affordable and deployable." Much of the semiconductor work is on Gallium Arsenide, a material that is much more expensive than silicon for making chips. Although it is faster than silicon, the primary motivation for using GaA is that it is ten times more resistant to the Electromagnetic Pulse (EMP) produced by nuclear explosions.[23] Thus, Course III makes chips for weapons systems. On the positive side, MIT materials science professors have studied ways of monitoring nuclear explosions (to verify limits on nuclear testing) and obtaining strategic minerals if the supply from South Africa is cut off.

Space is for Deadheads, not for Warheads.

Course IV: Architecture

This department originally focused on producing aesthetically pleasing and structurally sound buildings. But such mundane concerns are out of style today. MIT's "new architect" studies the space station, taxation and zoning, and helping corporations justify politically controversial real estate development plans. With the advent of the Media Lab, most research since 1985 has had nothing to do with architecture. Instead, there has been a proliferation of high-tech toys funded by the Japanese. The lab offers some exciting UROP projects in computer music, television research, computers in education, and graphic interfaces. Like film/video and photography, these areas may become marginalized as the military-industrial complex expands its Media Lab foothold in machine vision for tank detection and "Wargames"-style screen technology to better display Soviet nuclear attack.

Course V: Chemistry

The chemistry department researches mass spectroscopy, metal bonding, chemical detection and other seemingly innocuous areas. Indeed, it is the only place at MIT where one may study "free radicals" without being called an anarchist. The department's "rich technological menu" of innovations has applications from esoteric industrial processes to the processing of nuclear isotopes. Recent DOD work has included mycotoxins (for biological warfare) with the now-defunct Course XX (Applied Biology), and fuel-air explosions, a new technique which provides near-nuclear destructive capability using conventional arms.

Course VI-1: Electrical Engineering

Because the consumer electronics industry in the United States has all but vanished, the EE department at MIT concentrates in three major areas: biomedical, industrial, and the military. The first of these includes prosthetics and medical instumentation such as magnetic resonance imaging, pacemakers, and CAT scans. Industrial uses include automated factories, phones, and electricity. Electric power research is largely backed by the nuclear industry, leading to participation by EE professor Paul Gray in opposition to the Massachusetts nuclear power plant shutdown initiative on the November ballot. Some military uses at MIT to keep in mind: Radar is used for space tracking, spy satellites, and electronic warfare. Speech processing research, supported by the National Security Agency, is intended to automatically monitor phone conversations. Laser communications and C^{3}I are designed to send launch codes and doomsday messages to nuclear submarines and satellites in a nuclear war. Finally, transmitter research has included a project to expand the reach of Voice of America within the Third World.

Course VI-3: Computer Science

Computer Science is divided into two major military-funded labs: the Artificial Intelligence Laboratory and the Laboratory for Computer Science. The military applications include robust, "distributed" computer networks which survive when a node is knocked ("nuked") out, and languages to program them. The theory of computation group attempts to "prove" the correctness of militarily critical software and networks, designs sensitive encryption algorithms, and sometimes cracks them, to the NSA's consternation. It is the AI group, headed by Professor Patrick Winston, which holds the keys to the war chest. Using his clout as a member of the US Naval Research Advisory Committee,[24] Winston pulls over $8 million annually into the lab, much of it for "basic" research into robotics, "intelligent" networks, tools, and "smart machines." Though few of the lab's approaches may be practical on the battlefield today, they tend to justify the replacement of human decision-makers and soldiers with machines. This could lead to the accidental launching of nuclear war or the ability of the Pentagon to intervene abroad without fueling internal dissent by sacrificing American lives.

Two projects worth mentioning are the medical diagnosis projects of Peter Szolovitz and the educational work of Hal Abelson. Now that Joe Weizenbaum has retired, the lab should hire someone else to study the social effects of computing.

Course VII: Biology

Research in biology, in areas such as immunology and cancer, definitely has a human orientation. However, the military is expressing an interest in this area now, and Professor Alex Rich has frequently and publicly called for more military funding. With the abolition of Applied Biological Sciences, it will be interesting to see if the Biology Department becomes more involved in Biotechnology. MIT has already pressured the department into applying for a military grant in this area.

Course VIII: Physics

The Physics department at MIT is quite large, a remnant of the huge effort in physics during the 40's and 50's when atomic bombs were developed. Much of the physics research is on basic studies of theory, and matter. However, there are several areas worth noting: Field theory and some areas of particle theory are most closely connected to nuclear weapons. Free electron lasers, studied by Professor George Bekefi, are funded by the SDI office for their weapons potential. The laser work of the Plasma Fusion Center is riddled with military uses. Peaceful uses may be touted on campus while the results are quietly funneled into weapons work at Lincoln Lab.

Course IX: Brain and Cognitive Sciences

The cognitive science department studies coordination, vision, nerves, language, brain injuries, and aging. Formerly the Department of Psychology, the name was changed to focus on "hard" psych, which takes a reductionist, rather than wholistic, approach to human behavior. This means that the department is better adapted to receiving military money to emulate human vision with robots. It also means that if you want to study the introspective and humanistic side of psychology, only one professor with this specialty, Steve Chorover, remains.

Course X: Chemical Engineering

Bankrolled by the oil, coal, and pharmaceutical industries, the Chemical Engineering department specializes in real-world industrial processes used by huge industry. Polymer production, coal gassification, and biotechnology processing are among the active research areas. With the potential for production of hazardous wastes, the department should more actively emphasize processes which avoid waste production. Many companies evade US environmental restrictions by exporting industrial production to the Third World, resulting in tragic ecological damage.

Course XI: Urban Studies and Planning

Formerly called the Urban Systems Laboratory, the department was formed in the early 70's after inner-city riots and highway protests caused the government to place greater emphasis on housing and mass transit. Programs in these areas were decimated by the Reagan administration, resulting in a department without research funding. This is one of the few departments geared to solve society's problems rather than create new ones. But watch out for professors who help city agencies push construction projects through despite community opposition. Seemingly out of place at MIT (due, perhaps, to its high social relevance), Course XI has only attracted one or two undergraduates in recent years. Much of its revenue comes from foreign graduate students who make up ~50% of the graduate enrollment. There should be many more undergraduates. One bright spot is Adjunct Professor (and community activist) Mel King who heads the Community Fellows program. Another is Professor Gary Marx.

Course XII: Earth, Atmospheric, and Planetary Sciences

The EAPS ("eeps") department studies both basic science (such as plate technonics, coastal evolution, earthquakes) and advanced applications. Gravitational measurements have applications in orbit and trajectory calculation for spacecraft and missiles. Ocean floor plotting is relevant to submarine warfare. Geothermal science can predict volcanos and provide a source of energy. The space research in the department is significantly less militarized than that in Course XVI.

Course XIII: Ocean Engineering

Ocean Engineers do whatever the Navy wants them to do. This includes studies on how waves slow down ships, acoustic detection for submarines (especially in the arctic — read *The Hunt for Red October*), and ship welding. Many students are Navy ROTC cadets. Professors and students occasionally visit the Woods Hole Oceanographic Institution, which received $19 million in military funds in fiscal year 1987.[25]

Course XIV: Economics

This department provides economic models, forecasts, and theories about economic policy, operating under an unstated assumption that economic growth is good for America, and for the world. Unfortunately, these policies ignore the limits on growth imposed by the finite supply of natural resources and the fragility of the ecosystem. Growth is far more important for the owners of for-profit companies, which must grow or die under capitalism, than for workers whose wages do not necessarily rise with growth. MIT's department pays very little attention to Marxist, Labor, Feminist, or Green economics in which people and nature matter.

Course XV: Management

Research in management at MIT emphasizes the needs of executives in large, hierarchical organizations. The technology end of the department emphasizes office computerization, market forecasting and decision support systems. Several new degree programs for businessmen and women who want to go back to MIT and get a quick degree have aroused the ire of graduate students who think that these programs devalue the MIT education. The undergraduate program in management focuses on basic economic and planning skills. The most positive aspect of the program is that it leaves leeway for students to undertake independent interdisciplinary studies on the way to their degrees.

Course XVI: Aeronautical and Astronautical Engineering

The Aero-Astro Department, from which Charles Stark Draper Laboratory was formed, is the department at MIT most clearly in the Pentagon's camp. Although the department receives NASA funding for space research, the applications involved are hardly removed from the overall military emphasis of the US space program.[26] Research for Draper on Guidance Systems and fault tolerance continues to this day. The lab is also active in development of new jet engines and helicopter rotors. The Avionics program (with course VI) trains students primarily for the development of electronic systems for advanced military aircraft. The department even has a motion sickness laboratory to simulate some of the dangerous gravitational forces placed on pilots by new, electronically maneuvered aircraft.

Course XVII: Political Science

Most professors in political science have their own independent interests, from Asia to Africa, from petroleum to tobacco to hunger. However a small cluster of professors in the Center for International Studies (The Defense and Arms Control Studies Program) consults for the US national security establishment. Steve Meyer serves the CIA and Jack Ruina, an arms control advocate, sits on the boards of two SDI contractors. The undergraduate curriculum is clearly biased by the relationship of the department to the center: it focuses too much on East-West relations, where funding exists and not enough on the political situation in the Third World. Some excellent professors like Brian Smith, expert in Latin American Studies and winner of the Baker teaching award, have been denied tenure as a result. The CIS was established by members of and advisors to the CIA and State Department, and was the home of Daniel Ellberg when he leaked the famous Pentagon Papers that exposed lies by US leaders on what we were doing in Vietnam.[27]

Course XVIII: Mathematics

Research in the math department is regarded as totally "pure" by most of the professors in the department. However, the areas of field theory, waves, probability, and particle physics lay the mathematical groundwork for nuclear physics and other calculations of interest to the military. Undergraduate applied math has many applications in business. Doctoral students will not fully use their skills after graduating unless they enter academia or the military industry.

> **The more I study attempted solutions to problems in politics and economics and art, philosophy, and religion, the more one has the impression of extremely gifted people wearing out their ingenuity at the impossible and futile task of trying to get the water of life into neat and permanent packages. There are many reasons why this should be particularly evident to a person living today. We know so much about history, about all the packages which have been tied and which have duly come apart. We know so much detail about the problems of life that they resist easy simplification, and seem more complex and shapeless than ever. Furthermore, science and industry have so increased both the tempo and the violence of living that our packages seem to come apart faster and faster every day. There is, then, the feeling that we live in a time of unusual insecurity.** Alan Watts

Course XX: Applied Biological Sciences

Nuked by Provost Deutch in January 1988.

Course XXI: Humanities

The humanities department now has six areas: Literature, Music, Foreign Languages & Literature, Archeology & Anthropology, History, and STS. (The recently established Women's Studies program and the now defunct courses in Ethnic Studies were never given full status.) Rather than democratize the program by including additional areas, Humanities Dean Anne Friedlander wants to reduce the areas to only three. While MIT is advertising a major expansion of its commitment to humanities, actions like these cast doubt on the true intentions of the MIT administration. Claire Kramsh, former head of Foreign Languages and Literature, left in protest last year, and the new proposal deserves a strong student reaction.

Course XXII: Nuclear Engineering

The department trains people in the fundamentals of nuclear technology, and its campus research is confined to nuclear power, not nuclear weapons. However, graduates of the program are well prepared to go into the weapons industry. Given the recent problems with nuclear power plants, professors in the department are rubbing their rabbit's feet and crossing their fingers, in anxious anticipation of a revival of the nuclear power industry. In 1976-8 the department conducted a dubious training program in nuclear engineering for students from oil-rich Iran. Students opposed the program with sit-ins because it seemed geared to help Iran develop nuclear weapons. The revolution in Iran ended the program.

Course XXIV: Linguistics and Philosophy

Home of famous linguist and progressive intellectual Noam Chomsky, the department hosts a broad spectrum of activities and interesting personalities. Some professors in linguistics have complained about pressure on linguists to accept military funds for research related to speech recognition.

STS Program

MIT established the Science, Technology, and Society program to stimulate critical — but not *too* critical — thinking about the social issues involved in science and technology. Former department head Carl Kaysen systematically purged former faculty such as Langdon Winner and David Noble who wrote that new technology does not always result in progress (see p. 43). Somewhat underfunded and ghettoized by its location on the east end of campus and lack of a department number, the program provides some interesting research opportunities (women and computers, effects of biotech, etc.). Kosta Tsipis, an expert in arms control and military issues who heads the Science and Technology for International Security program, is both approachable and supportive, and so are Professors Louis Bucciarelli and Charlie Weiner.

"We submit to the peaceful production of the means of destruction, to the perfection of waste, to being educated for a defense that deforms the defenders and that which they defend."

- Herbert Marcuse, 1964

Section II: Issues at MIT

A Word About MIT's Priorities

This section describes some of the issues that have been "hot" on the campus in the last few years. To new students, expecting the perfection described in glossy admissions pamphlets, the articles may seem a bit critical, but they provide some rarely published perspectives on the Institute.

Tuition has increased faster than inflation. Military research has flourished. Minority faculty have vanished. MIT deans and administrators often interfere with student interests, rather than serve students. The Institute has reinforced the character of its faculty by continuing to promote mainly white male professors more concerned with their research than with students in the classroom. MIT has ignored student and faculty opinion on divestment.

What's happening here? Is the MIT administration deliberately plotting to screw us? We think not. Rather, MIT simply follows the agenda of the MIT Corporation, a body dominated by white-haired corporate directors bound not by academic principles or human needs, but by the imperative of private profit. The "corporatization of higher education" destroys the university by imposing entrenched corporate priorities, values and biases on an academic community that should be independent of such influence.

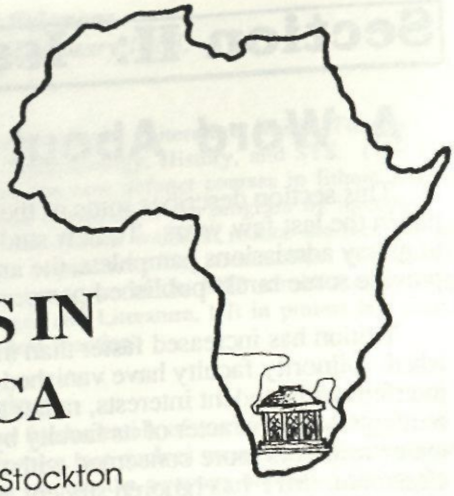
What's wrong with the priorities of The Corporation?

Well, just think: If you are an executive who makes $500K per year, you do not have the same priorities as a financially starved student or an ordinary person. If you can afford to buy your own clean water or transportation, you do not have any incentive to pay for these public services through taxes. Large corporations are powerful political entities which influence policy to suit their interests. A tax code, defense budget,[†] farm policy, and social service agenda which subsidize billion-dollar institutions leave student aid programs out in the cold and keep the minimum wage frozen below the poverty level at $3.35/hr.

Although many MIT faculty and administrators identify with exisiting goals, most students, staff and faculty want MIT to follow an ethical, humanitarian set of priorities. However, since the administration and Corporation are the sole decision makers at MIT, the Institute will continue to follow their priorities unless we alter this course. We cannot simply petition for change; the administration cannot act for us. We must create the desired change.

[†] For example, the money the US spends to protect tankers in the Persian Gulf is a huge subsidy to oil companies. If military expenses were factored in, the oil would not be marketable. It would cost $600 per barrel and we'd buy it somewhere else.

MIT'S INVESTMENTS IN SOUTH AFRICA



by John Parsons and Kathy Stockton

US corporations with operations in South Africa support the racist regime in a variety of ways. Above all, they are the source of its military and its economic strength and the economic basis for the continued viability of that regime. US corporations supply materials directly to the police apparatus, they pay taxes to support the military budget, and they deliver key technological information to maintain the sophisticated economy. When in the summer of 1985 the South African economy faced a foreign exchange crisis which threatened its capability to pay its debts and to buy the imports on the world market that it needs to continue its policy of apartheid, Chase Manhattan Bank helped to organize the international financial community to put together an emergency program of loans and agreements which restabilized South Africa's economy. When demonstrators chant "P.W. Botha shoots to kill, Chase Manhattan foots the bill" they are not being rhetorical.

MIT invests in apartheid. Like other major universities, MIT has a large endowment of funds invested in various stocks and bonds. In 1985 the total value of the endowment was approximately $800 million; $150 million of this was invested in corporations with operations in South Africa.[28]

When MIT invests in the stocks and bonds of a corporation, the Institute becomes a part owner of the corporation. It gives the corporation the use of the Institute's funds; it has the right and obligation to debate and vote on key decisions of the corporation; and it earns a share of the company's profits. Across the country state legislatures, union members, students, and university trustees have decided to stop turning money over to US corporations for their investments in South Africa. Alternatives exist: there are more than 300 other large firms with total investments of $600 billion in which MIT could hold its endowment. For example, several major investment funds such as Working Assets own no stock in corporations doing business in South Africa. Massachusetts is one of several states which has withdrawn all of its investments from US corporations with operations in South Africa.

In 1985 the MIT faculty voted by a ratio of 4 to 1 that MIT should do the same.[29] In February of 1986, MIT students constructed a shantytown on Kresge Oval which was demolished two weeks later by MIT police, who arrested eight students for "trespassing" on their own campus. Later that month undergraduates, graduate students, and various student organizations all voted for MIT to divest its stock in corporations operating in South Africa.[30]

Decisions on MIT's investments and on its relationships with those corporations in which it owns stock are made by members of the MIT Corporation. Members of the Corporation are not required to consider or respond to the opinions of the rest of the MIT community. They have remained staunch defenders of the right of US corporations to make profits operating in apartheid South Africa. When resolutions have come before the shareholder meetings of those corporations calling for the corporation to end its operations in South Africa, MIT has not even actively supported these resolutions, nor has it ever sponsored any resolutions designed to limit the cooperation of the corporations with the police, government or other institutions of South Africa, or to otherwise bring about positive change. Many members of the MIT Corporation are members of the Boards of Directors of US corporations directly involved in South Africa or maintain other business relationships with them. Some of these relationships and the nature of the support the companies give to South Africa are listed below. The MIT Corporation has publicly stated that it is opposed to apartheid, but it continues to invest in South Africa. *Words without action turn to lies; sell the stocks and cut the ties.*

Conflicts of interest in the Corporation prevent MIT from exercising its responsibility to society. To "corporate academics", MIT is just like any for-profit corporation. The Corporation claims that fiduciary responsibility holds it to maximize its return on the endowment, just as a corporation maximizes the shareholders' return on investment.

MIT, however is not just a profit machine. As an academic institution receiving public support and tax-exempt status, it has a responsibility to its students, faculty, staff and the general public. However consistent the MIT Corporation thinks it may be, MIT's investments are not neutral, and lives continue to be seriously and destructively affected. Those to whom MIT is responsible have made it clear that they do not wish to contribute to apartheid. When will MIT respond?

Partial List of MIT Corporation Members

Name (term expires)	Corporate Affiliation
Colby Chandler (1990)	Director, Ford Corporation
Edward David (life)*	Former President, Exxon
Carl Mueller (life)†*	Director, Bankers Trust Co. 1977-
Kenneth H. Olsen (life)	Director, Ford Corporation
John Reed (life)†	Chairman, Citicorp/Citibank Director, United Technology Corp.
David Saxon (chair)*	Member, Ford Motor Research Adv. Comm.

Corporations in Which MIT Holds Stock

United Technologies Corporation employs 1200 workers. The company has a closed-shop agreement with some of its workers in a white-only union. In its Otis subsidiary, 483 black workers are segregated into a second union that is controlled by whites. Its Airco subsidiary has no union.

Citibank/Citicorp has said it will not initiate any *new long term* loans, but says nothing about short term loans. Also, it rescheduled its existing loans in 1985. Currently it has loans extending from 1979-97 totalling $855 million to African Explosive and Chemical Co., The Republic of South Africa government, Volkskas (government owned bank and government owned agencies), MINORCO (part of the Anglo-American Co., South Africa's largest corporation) and the Bermuda Holding Co.

††**Ford Motor Corporation** sells its products directly to the South African police and military. Its record on labor relations shows strikes by the National Auto and Allied Workers union in 1979, 1982, and 1984 to protest layoffs. In the 1984 strike, 1500 struck against the layoff of 500 others workers; the only result was the layoff of 800 more that year. In 1985, 2000 jobs were cut.

††**Exxon Corporation** sells its oil to the South African police and military. It claims to be making plans for disinvestment.

J. P. Morgan Corporation has two loans extending from 1982-89 totalling $240 million to South African Breweries and to Barclays, which separately loans directly to South Africa.

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* executive committee member

† investment committee member

††Harvard agreed to divest its holdings in Ford and Exxon only, because these two companies sold directly to the government's police and military forces.

"These capitalists generally act harmoniously, and in concert, to fleece the people." – Abraham Lincoln, 1837

ETHNIC STUDIES AT MIT ?

by Ron Francis

Do these facts jibe?

1. The number of courses in the Humanities and Social Sciences (HASS) dealing with Ethnic Studies dramatically dropped from a high of 10 in 1976 to a low of two in 1986.
2. From 1976 to 1986 no woman junior faculty and only one minority junior faculty member in HASS, Marcus Thompson, was granted tenure.
3. The Minority Student Issues Group (MSIG), part of the MIT Administration, after two years of investigation (1984-86), called for subjects dealing with race and with the history, literature and culture of Blacks and other minorities.[31]
4. In 1987, MIT can't explain why it still won't offer more than one or two ethnic studies courses.

Three fundamental problems remain unaddressed by the Institute. The first and major problem is that MIT refuses to set aside a reasonable amount of money for faculty chairs at MIT, and no minority group can easily exert pressure on the school to do this.

The second is that departments are not made accountable for their recruiting efforts. Moreover, the candidates found do not receive respectful consideration. The increasing presence of black women in humanities in the U.S. is in stark contrast with the embarrassingly small number of black women faculty at MIT, which is decreasing now that one was denied tenure last term.

Third, the accomplishments of minority or women junior faculty often go unrecognized while they are at MIT. For example, HASS has promoted only one of its minority or women junior faculty to a full professorship; the high turnover of minority and women junior faculty demonstrates this.

MIT still offers no Black Studies Program (or Ethnic Studies of any sort) . Last fall, MIT put a huge band-aid on this dilemma. It said that Harvard and Wellesley have Ethnic Studies, so go study there! This response recognizes MIT's failings on a superficial level only, and diverts attention from its destructive practices with regard to minority faculty.

When will MIT practice what it preaches about ethnic studies? What will it take to force MIT to go beyond sweet sounding declarations and actually take steps to rectify the situation?

"Welcome," Minority Students

...and may you remain as few in number as you are now!

In November of 1986 about fifty students, faculty and staff — Blacks, Latinos, Asians, Whites — came together on campus for the first time to discuss racism on campus. They concluded that conditions for minorities have been in rapid decline for the last ten years. Together they summed up the problem of racism at MIT in terms of numbers, power, and inadequate official response.[†]

Low Numbers

The administration has improved in this area since 1986 thanks to many pressures. Attrition remains high for Black undergraduates, despite the fact that their socio-economic and academic backgrounds are improving. The self-help level, which a student once could earn in one summer at just over minimum wage, has increased to $4900 per year (1988) and adds yet another barrier for low-income undergraduates.

One important criterion for undergraduate admission at MIT — SAT scores — has been shown by countless studies to be as useful for predicting academic performance of minorities as shoe size. In the graduate school, recruitment is left to the good will of individuals. Three and one half percent of the graduate class in 1976 were Black, whereas in 1985 only 1.8% of new graduate students were Black.[32] The number of Black faculty has been halved to a mere 12 (that's a number, not a percentage) out of a total of over 1000 faculty members.[33]

The overwhelmingly White and male faculty, charged with advising a few minorities, do not view them as advancing students who will someday replace them. Meanwhile, so many minority faculty are denied tenure that only a handful of role models exist to provide guidance to students of color. For the individual, those small numbers produce a feeling of being on display as the only, and therefore the prototype, minority of their classroom or department. Networking is impossible, and the academic experience is made unnecessarily difficult.

Lack of Power

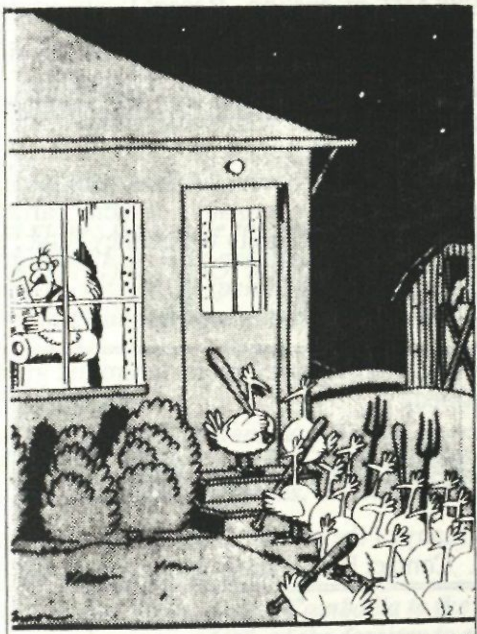
The students note that they have no access to the decisions which affect them. One instance was the dismissal in 1984 of Dean Mary Hope, who was well-loved by students and had founded the Office of Minority Education. The institution's intransigence about divesting its $180 million in South Africa makes Black students feel exposed and unwelcome, and allows many white students to feel that racist behavior is acceptable. Official recourse regarding racist or sexual harrassment has been decried as a process of pacifying the victim; its aim is to keep MIT's image untarnished.

Inadequate Official Response

In the spring of 1986, MIT released a study of racial issues — the McBay *Report on the Racial Climate at MIT*. It was disappointing but predictable to see that the administration-produced paper blamed individuals and ignored the Institute. The MIT administration publicly treated the report as a great achievement, and called a faculty meeting to discuss the report. The extent of their discussion of racism was the congratulations they poured on each other for being so honest — predictable given that almost the entire meeting consisted of White males.

It has become clear that the students themselves will have to set the standards which MIT must meet to be a legitimate institution. We must investigate the ways in which racism manifests itself at MIT, make specific proposals as to how the bottom-line can be reached, set up a timetable, and when it becomes necessary, take direct action.

Students should be encouraged by recent activities around the New England region which show that well thought out direct action such as office takeovers or sit-ins can have immediate successful results. Let's DO IT NOW! We know what the issues are, so let's get on with it.



"Again? Why is it that the revolution always gets this far and then everyone just chickens out?"

Campus Police Harassment

We the students have been well advised to seek the help of the MIT campus police when we must travel across campus alone at night , lose our keys or lock them in a lab. The Campus Police, headed by chief Anne Glavin, can be said to be helpful, at times. One thing that cannot be said of them, however, is that they are colorblind. The 1986 annual report of the MIT campus police states that one out of every three persons they stop for I.D. checks is Black. Take care to note that only one out of every 35 students at MIT is Black. Their operating assumption is that people of color are automatically suspicious unless they can prove ("SHOW ME YOUR I.D.") that they are not. At a "speak out" meeting at one of the dorms this past spring, students recounted incidents of being followed, verbally abused, and repeatedly stopped for I.D. *The Tech* printed a letter about the Campus Police investigating a "suspicious looking person" trying to get into a locked room. There's a catch: it was his own lab, he worked there, and he of course had his own keys. And he was Black.[34]

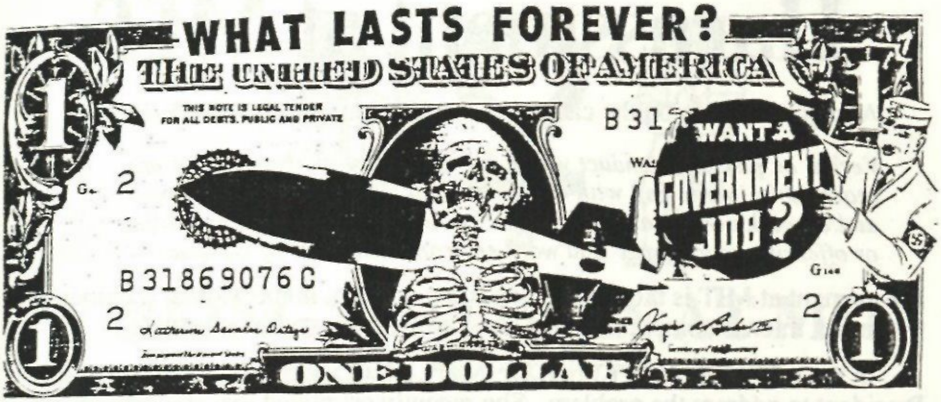
More recently, minority student tutors were harassed and mistreated by a high level administrator in the MITES program. Several minority students have been declared *persona non grata* for suspect reasons. One minority student recently won a court battle against MIT due to their refusal to admit this student to the 1988 MIT graduation. Recent flyers warning of suspect Black males acting "suspiciously or loitering in the halls" has been distributed around the Institute just in time for the arrival of new freshpeople. Students in a predominately Black dorm have been continually bothered by allegations of invovement in campus crimes... When will it end?

The Office of the Dean for Student Affairs admitted that no formal grievance procedure exists for complaints of racial harrassment. MIT police are not accountable to the community which they serve, and are free to disregard the rights of minority students. Only radical action can possibly reverse this trend. If not now, when?

†Check out a document produced by underground graduate students and undergrad, entitled

AFRO-AMERICAN CONCERNS AT MIT

for a guide to many of the problems at MIT and suggestions on how to remedy them. Contact Ron Francis for a copy at x3-6802 or x5-9733.


WHAT LASTS FOREVER?
THE UNITED STATES OF AMERICA
THIS NOTE IS LEGAL TENDER FOR ALL DEBTS, PUBLIC AND PRIVATE
WANT A GOVERNMENT JOB?
B 31869076 C
ONE DOLLAR

GOD BLESS THE SYSTEM:

The system is so democratic we have no idea what our government has been up to in Central America; MIT is so socially reponsible, it is the largest military contractor for that democratic government. We are so independent minded, we follow all the objectives that MIT sets down for us. Such democracy, such social responsibility, such independence of mind, are the foundation of the system.

GOD BLESS THE SYSTEM:

The system that spends 300 billion dollars a year on means of destruction while a million go homeless, and 30 million suffering from malnutrition, and 30,000 murdered in Nicaragua through its covert operations.

GOD BLESS THE SYSTEM:

The system that makes it possible for engineers to design nuclear bombs without worries of how they are used or against whom. God bless the system that makes it possible to spend 300 billion dollars to maintain an arsenal of 30,000 nuclear warheads, enough to fry the earth 30 times over.

GOD BLESS THE SYSTEM:

The system that teaches MIT students to program the computer used in the research of RAYTHEON, Inc. — to build the helicopters sent to the Salvadoran dictatorship to murder peasants. At least 70,000 people killed since 1979.

GOD BLESS THE SYSTEM:

The system that bombed Vietnam and Cambodia to the age of stone, killing 3 million people, destroying 60% of the forestry to preserve democracy.

Harassment at MIT

A major problem on the campus is harassment, which MIT defines as:

Verbal or physical conduct which has the intent or the effect of unreasonably interfering with any individual's or group's educational and/or work performance at MIT, or creating an intimidating, hostile, or offensive educational and work environment, on or off campus.

Harassment at MIT is motivated by sexism, racism, homophobia, religious intolerance, intense competitiveness gone awry, and general meanness.

In the mid 1970's, MIT hired Dr. Mary Rowe as Special Assistant to the President to address the problem. She recently estimated that she receives on average two complaints of harassment per day during the academic year. Her statistics do not include reports made to the Dean's office or the Mental Health Department. Roughly half of the cases involve sexual harassment.

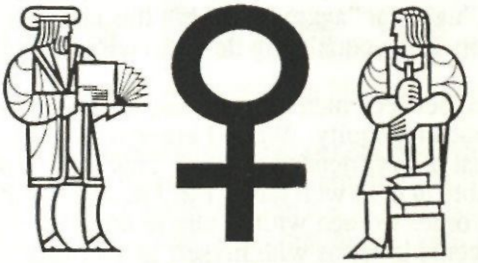
The MIT administration tries to deal with each case on an individual basis. In many cases the offender has stopped after communicating with the person he/she is harassing, usually through an intermediary. Some academic departments mail a memo discussing harassment to the entire department when a member has been accused, in the hopes that the offender will get the message. In some cases these actions are inadequate.

In cases involving repeat or severe offenders, MIT must take a stronger stand. Penalties should include suspension and expulsion from the Institute. Only by imposing severe penalties can the Institute send a clear message to potential harassers and to the public that harassment will not be tolerated.

MIT must also develop procedures that would establish standard penalties and permit the staff handling harassment cases to document the problem. This lack of established procedures contributes to harassment because offenders perceive that they will at worst be given a slap on the wrist.

In order to properly address the problem, MIT must keep records of all complaints filed so that we can know its nature and magnitude. Although discretion is required to protect the person filing the report, this does not prohibit keeping any documentation at all. The procedures must also offer the person who has been harassed an advocate during the process. And some cases which are resolved must be reported publicly.

Developing standard procedures for handling harassment cases will not be easy. But the Department of Urban Studies and Planning recently spent a great deal of time establishing its own department-wide procedure. The entire campus urgently needs to learn from their example.



BEING A WOMAN AT MIT

By an alumnae of Pro-Femina

When I was first asked to write this article, I declined, saying "but I wasn't a typical woman at MIT!" I pondered over my four years there. Mine was not a typical undergrad experience. But I quickly realized that being a woman at MIT is atypical, and the women who go to MIT are atypical.

Though women now comprise 35% of the incoming class, far less than half of the MIT faculty are women. Many of the female faculty that MIT does have are in traditionally "female" (i.e. noncompetitive) disciplines: architecture/visual studies, biology and the humanities. In nearly every department, women faculty members have been denied tenure because they are women. Consequently, there are very few role models for female students. A former head of the physics department once commented that women did not have the capacity to be good physicists. Furthermore, some male professors actively discriminate against women in their classes by reluctantly or patronizingly answering their questions.

A female undergraduate may find that her professors' attitudes are not the only obstacles to overcome. If she aspires for excellence, her male peers may find her to be "aggressive" and therefore "unfeminine." I myself have found that if I wished to have my male lab partners listen to my opinions, I had to ask them questions and let them draw the obvious conclusions. In addition, women who ask technical questions of their male peers may be seen as "coming on" to those men. In a study done on graduate women in Course XI (Urban Studies and Planning), one of them commented that "more times than not, the answer to such a question is followed by an invitation to go out." In such an environment many women feel isolated and find learning difficult, because they are denied comfortable peer interaction and consultation. One undergraduate woman described the following incident: "Within my first week at MIT, I was barraged with men, all of whom wanted to go out with me. When I told them no, they ceased even to be interested in me as a friend. One man, when I made it clear to him that my intentions were purely platonic, ceased even to speak with me."

The rejected men attempt to blame the ratio problem on women students by labelling them "ugly" or "aggressive," but this pettiness only further embitters the women. Hopefully, equalizing the ratio will dispel these stereotypes.

The balance between men and women, at least in the undergraduate population, is approaching equity. When I entered, only about 25% were women. As a result, most of my friends are men. This is not a major problem; I had always been more at ease with men. But I discovered that at times I had to actively seek out other women with whom to associate. In some ways, it's taken a long time to come to terms with myself as a woman, and not just a genderless individual. Due to this disassociation with gender, I may have spared myself some of the limitations of gender role socialization. But it has also taken me longer to admit that discrimination against women does exist.

So, this is where this discussion ends. If there is one thing I can impress upon you, it's that I believe that no matter what your experiences, it is important to share and compare them with other women at MIT. They are your colleagues. They are your support when the "old boy network" becomes intolerable. Remember that many of the most enlightened people you will ever find are women you will meet here. Never forget that.

"What is the American Dream but the dream of material things? I sometimes think that the United States for this reason is the greatest failure in the world." -Eugene O'Neill

"Science may have found a cure for most evils, but it has found no remedy for the worst of them all: the apathy of human beings." –Helen Keller

Being a Man at MIT

By a man in the Alternative News Collective

Like many men here, I was socially inexperienced when I entered MIT. In high school, I had few close friends, male or female. I avoided the party-going crowd. When girls expressed interest in me, I never got up enough nerve to ask them out. Sometimes I spent hours psyching myself up in order to call someone. I'd pick up the receiver. My heart would start pounding in uncontrolled nervousness. What would I say? What would I do on dates? I almost never called.

At MIT I knew this situation would change. The same qualities that made me somewhat of a social outcast during high school led my MIT peers to accept me. Yet I soon discovered that the Institute presented new roadblocks.

As a freshman celebrating my new independence, I spent a good deal of time talking to women in my dormitory. Yet I developed more friendships with men. When I look back, I see that the ratio made a difference. All the women I talked to received continuous attention from men. For a woman to develop close friendships with all the men would be impossible, but rejecting this over-attention politely is difficult.

In the instances where I could have developed friendships with women, social awkwardness and sexual tension got in the way. If a female friend asked me to dinner, I would not regard this as matter-of-fact social interaction, but as a milestone of grave international importance. This prevented free and relaxed communication, and cast a dark cloud over even a platonic friendship. As a freshman, I made no physical advances during such situations. Yet I would later wonder whether I should have done so.

I suspect many other men also wondered if they were aggressive enough. Many complained about MIT as a "four-year sentence to celibacy." As freshmen, we watched as more "experienced" (read desperate, aggressive, hardened, and manipulative) upperclassmen went after the incoming "crop" of "fresh" women (the meat market). In Baker House, the male student in charge of the housing lottery always assigned the "freshest" women to live on his floor. The notion that "the more aggressive you are, the better you do" — a capitalist view of human relationships that treats people as commodities — was reinforced by the hall tutor. His advice to a sexually starved sophomore confused about relationships: "Don't jerk off for a month and let nature take its course." How fitting for MIT: yet another technical solution to a human problem. I didn't follow his advice. I didn't resort to oppressive tactics. I overcame my shyness and had my first sexual experience ever as a sophomore.

If you think about what it would be like to be on the other side of the gender line, it's easy to see that the environment here can be difficult for women. You begin to see a lot of the sexism that you had been denying. Men are not socialized to be supportive of other men, and thus men often depend on women to play a supportive role. This is one way that men oppress women. Women who appear too open and friendly have to face being asked out and harrassed, and thus they tend to withdraw. And the constant threat of sexual assault puts even more pressure on women. Some women crave the attention they get because they can get away with anything without losing popularity. I imagine that many women have difficulty adjusting to normal social life after they leave MIT. When I visited Yale one weekend, I realized just how warped the atmosphere at MIT really was. At Yale, people are friendly, but not obsessed with the competition and control that pervades social interaction at MIT.

In fraternities and dorms where the male concentration is highest these problems are at their worst. Men support each other in macho, oppressive behavior. Women are degraded and objectified. In coed independent living groups where the ratio is nearly even, hostile and one-dimensional attitudes of women dim and fade. When you live in an environment with many women you see them as people.

What advice can I offer? Very simply, a prerequisite for healthier relationships with women is the ability to establish meaningful relationships and develop ourselves without women. We should be able to have discussions about personal feelings with male friends, and establish strong platonic friendships with both women and men. After we develop ourselves as human beings, we can then relate to women on a more human basis, one that is less affected by peer pressure, physical characteristics, media images, or the MIT environment.

It is helpful to escape this male and machine dominated subculture. Get out into greater Boston. Don't just seek out the club scene which is also riddled with materialist attitudes, but check out people's daily lives. Continue to explore off-campus life until you feel at ease with men and women. There are many sensitive and intelligent men and women in Boston. Get to know them; don't just rush the physical side. Define and communicate your limits, rather than allowing tension to build by placing that burden exclusively on your date. Before too long you will be able to talk with men and not look on them as competition, or spend time with a woman and not be constantly wondering whether she will sleep with you. Then take another look at MIT.

[Off Their Backs and On Our Own Two Feet *is a wonderful booklet of essays by men advising other men on dealing with sexism. For a copy, send $3.45 to New Society Publishers, 4722 Baltimore Ave., Philadelphia, PA 19143. Ask for a catalog too!]*

The Post-feminist Myth

by a member of ProFemina

Many MIT women don't buy it. The oppression stuff. No way are they The Subordinated, The Dominated, The Possessed, the cowering OTHER beneath the sublime male SELF. "Gee I don't feel socially subjugated," is easy to say, especially since we women have it good here. We usually go on to promising carrers. We receive free pregnancy tests, abortions, fertility tests, and gyn exams under the MIT Health Plan. We have Lynn Roberson and Mary Rowe (see p. 65) to go to if we have any problems. We have the Cheney room to go to if we need a male-free environment. We have the Women's Resource Center, next to the Women's Studies Department. We have choices. We have some community. Being a woman at MIT simply is not as difficult as it is in the state of Massachusetts,where over 100,000 mothers with dependent children are poverty-stricken, and where the infant mortality rate for minorities is higher than in some third world countries.

What does exist at MIT, in truckloads, is subtle discrimination against women. You will probably meet many women and men who deny this is true. I have. Yet the facts show that sexual harassment is a daily part of life here; someone complains to Mary Rowe, Special Assistant to the President, every single day about sexual harassment.

Anti-woman sentiment is expressed in many ways here. You can find it in a lot of the grafitti littering the libraries and bathrooms. You can find it in the anecdotes (A frat sends a "Fuck Truck" to a neighboring all women's school. A frat party poster has "AOWD," Any Orifice Will Do, written on it. A woman leaves her living group because she is continually labeled a witch and a whore. A woman gets an obscene message on the computer. A male student points to a female student he doesn't know in a hallway, pretends to shoot her, and says, "What's blonde, bloody, and smeared on a wall?" etc., etc., etc....) You can find it in the fish-bowl syndrome: "Wherever I am ... [men] are always staring at me as if I were some sort of freak," said one woman in a study on the environment for women in Computer Science.

These kinds of attitudes seep into the academic arena as well. Many women feel they have a hard time being taken seriously. It's Jane the Woman, not just Jane, who asks a question in a mostly male class. There are few role models for women students. Women comprise only about 5% of the faculty, and most of the textbooks are written by men. Therefore it is men who set what the jokes will be in the classroom. For a long time, a favorite joke of a prominent biology professor was that cell junctions are like women's breasts. To demonstrate this clever discovery, he would take a well-endowed female "volunteer" from his class, and position her facing him in front of the class.

He then moved towards her until her breasts touched him, to display cell union. His "little joke" stopped after complaints were made.

Humor is not harmless. If someone's sense of humor makes you feel uncomfortable, speak up, make your own joke, or complain to someone. Switching the sex roles in someone's little joke can often quiet their antagonism. (Imagine if a woman biology professor had a male student touch his penis to her in front of the class in order to demonstrate cell juncture!)

Sexuality impinges on academics in a more personal way, as well. Many professors and t.a.'s have been known to "come-on" to students. Some even reduce the grades of those students who won't sleep with them. On the other hand, other professors may just be patronizing to women. A former head of the physics department, well-known for his humanitarian views, once commented that women do not have the capacity to be good physicists. Again, if you see such attitudes surfacing in the classroom, talk with your friends and report it. Unfortunately, most cases are not documented and action is rarely taken.

And there is rape. Rape, both stranger rape and aquaintance rape, occur at MIT. If you are raped or feel the threat of rape, contact the Rape Crisis Center (492-RAPE) — get a supportive advocate before dealing with MIT. Use the Campus Police escort service when you feel you need it. Remember to call ahead to avoid waiting in an uncomfortable place.

MIT is in a state of transition regarding women, which really means that maleness overwhelms this campus. In the incoming class, despite the hype of increasing numbers of women, there are twice as many men as women. Women are barely represented on the faculty. There are over thirty male frats. And most of the seats of power in *The Tech* and the UA are occupied by men.

Being any gender at MIT can be a drag, but it is not reverse-sexism to recognize that general maleness causes problems for the women here. In an environment like MIT's, being a woman can mean feeling that the best thing for MIT women to do is to revel in their womanhood. This is already starting to happen. Women's groups that are not the MIT Wive's Sewing Club are popping up all over. There are women's academic support groups in some departments. There is a women's cooperative board, a Women's Health Education Network, a few sororities, a Society for Women Engineers, and Aszociation of Women Students/ProFemina. We can create an area of support within an environment that has traditionally been alienating and hostile.

"Someone who has enjoyed a reprieve, however brief, from the inhibition on love and trust that our society enforces is never the same again."
– Susan Sontag

MIT's ARCHITECTURE

by Pierre

You probably weren't expecting to see a discussion of the MIT architecture in a document like this. However, for a wealthy and technically excellent university, it's worth stopping for a while to look at the way the place has been built, how that affects you both in terms of the sorts of things that you do and how you feel as you walk around the place. After you read this, you may wish to look about as you explore the campus and see if you agree with my arguments.

In summary, a few general observations can be made about the building styles:

- The whole campus has a very militaristic feel about it;

- The buildings are all designed to be looked at from the outside. From the inside they are often not terribly functional.

The following examples illustrate the overbearing oppressiveness of the structures:

The student center, indoor track and Dewey Library (E53) are singularly ugly.

Perhaps they are inverted pyramids to entomb dead presidents or are meant to represent bunkers. There's no reason why the indoor track should have no windows, why the Dewey library should have virtually none, and why the student center, a place for people (?), should be so overwhelming and inaccessible. Unfortunately the new construction makes it difficult to do so, but stand outside and ask yourself if you want to go inside. Similarly, why is the entire entrance area to the Dewey library concrete?

Now, look at the main building. It was built during the first World War when concrete was fairly new (the cutting edge you could say). Compare its form to other buildings of the same period. They were generally brick, and built on a human scale. When I first went into 77 Massachusetts Avenue, I felt quite threatened, and very overwhelmed.

Rather than use sculpture to make MIT feel more human, it is consistently used to make the buildings feel more oppressive and more impressive. Virtually all the sculpture is black steel shields and swords. Could it be more unfriendly? Can you count the number of sculptures on campus that have any representation of people?

RESISTANCE
CREATE

And why are all the buildings referred to by numbers instead of names? Most universities use the names of previous professors, or of people who have contributed something to the University. Some MIT buildings actually do have names, but ask someone where the Compton building or the Green building is. Using numbers to identify buildings (and courses and classes) is very alienating and detached from where you are and what you are doing.

Not only are a lot of the buildings ugly, but they are generally not terribly functional. In Winter you will see that many buildings are very difficult to heat effectively. Classrooms will often be hot and stuffy. If MIT is one of the premier technical institutions in the world, why is it that they can't arrange for their buildings to be engineered to be functional?

Consider the atrium in building E23-E25 (the health services building). Not only is this an enormous waste of space, but MIT, the paragon of technical excellence, must be the only university in the world that has a main entrance through an infirmary!

Finally, there is very little space on the campus for people. It seems that the only place where you can feel that you belong is in your office or lab or dorm.

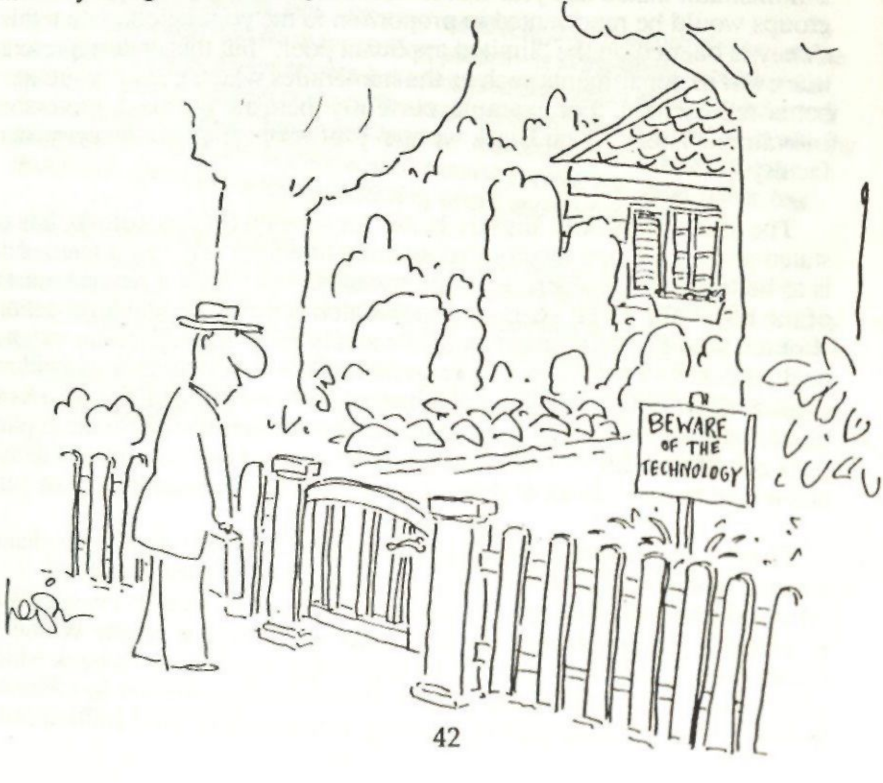
Only one of the green areas on campus is designed in such a way that people feel comfortable using it. That is the area outside the Weisner media building (the inside-out toilet) and the hospital. The Killian Court has virtually no one on it at any time of the year, except to play frisbee. Why? See if you ever feel like sitting there.

There is nowhere on the campus where people can just meet and "hang out"; there is no natural meeting place. The old student center had a coffee shop that never felt convivial. Undergraduates aren't allowed in the Muddy Charles Pub.

The campus environment has been created in such a way as to make MIT totally divorced from the Cambridge community, and to make it very difficult for people who live on campus to get off. You can either go to Boston, crossing the river, or by trekking to Kendall Square (long trip, and a big effort). Or, you can walk up to Central square or catch a bus to Harvard square. (Count the number of times you actually go to Harvard square this year.) None of these is terribly attractive in the middle of Winter. MIT owns virtually all the land behind the campus, from Kendall Square to pika; yet none of its proposed development plans attempts to create a community around the campus that will make life here more pleasant and realistic. Instead, they are opting for hotels and laboratories with shops to service them.

As you ponder this, consider that MIT is a 'land grant' college. That is, its land was granted by the Federal government and the Commonwealth of Massachusetts to create a university for the people; yet, for its closeness to Boston, it is a very isolated place.

As I said in the introduction, this article will hopefully help you explore the campus. Next time you're trudging down the infinite corridor at 3:00 am, blearily seeking output, listening to the echo of your feet off the concrete and cursing your not-so-favorite lecturer, look around you and decide if the place was really designed to make you feel at home.



THE TRAUMA OF TENURE

by Steve Penn

Professors will play a critical role in your life as an MIT student. They will be your instructors and advisors, and a few will eventually become your role models and your friends. The positive effect they can have should not be taken lightly. The quality of a class is largely dependent on the ability of the professor to teach the material. The same is true for a good advisor influencing quality research.

With this in mind, the tenure decision process warrants examination. Why, for example, are the highest quality teachers as rated by the students consistently denied tenure? The past three winners of the Baker Award for Excellence in Teaching, commonly known as the "Kiss of Death," have been denied tenure. Only 13 of 30 winners have received tenure.

A sadder reality is the number of minority and women tenured faculty at MIT. Only about one percent of MIT's faculty is Black, and there are even fewer Latino professors. There are no Native American professors. An MIT administrator stated last year that it would take twenty years before these ethnic groups would be represented in proportion to the population. Often this deficiency is blamed on the "limited applicant pool," but this underrepresentation is true even in departments such as the humanities where minority groups are better represented. For example, currently there are no Black professors in Literature. There are no Black woman professors at all on the permanent faculty.

The situation is only slightly better for women (of any color). It is openly stated among women faculty that the only tolerable way to get tenured at MIT is to be tenured elsewhere and then transfer. Otherwise a woman must be "one of the boys" for seven years or else threaten community and legal action. Women who get their tenure at MIT usually do so through some series of appeals process. Professors whose work has been acclaimed worldwide are consistently denied tenure at MIT because of their sex and/or race. As with ethnic minorities — even in the areas of the humanities where the applicant pool is half women — MIT has only ever tenured two women not tenured elsewhere before. Both of those appointments have been in the last year.

Finally, professors with left-leaning political beliefs stand little chance for tenure. Specifically, former Professor Langdon Winner, author of "Autonomous Technology,"[35] was denied tenure by former Provost Walter Rosenblith. In the meeting of the Academic Council to decide Winner's tenure, Rosenblith read a rather mild passage from Winner's book which made a vague reference to MIT and stated, "Ideas like that will not be tolerated at this Institute." In addition MIT is currently being sued for $1.5 million and tenure by former STS Professor David Noble, who was denied tenure for his political beliefs.[36] Noble, now tenured at Drexel University, was a highly rated teacher who was also noted by the academics in his field for ground-breaking work on the process of technological development.[37] However when Noble applied his analysis skill to the Institute itself, he was despised by the administration and soon thereafter denied tenure.

Sadly, the heavily touted fair process of tenure is in reality quite biased. Moreover, the burden of this injustice is sharply felt by the students, who do not get the professors that they deserve. Just over a year ago, the students won one battle. Professor Ruth Perry, who has fought tenure denials twice on the grounds of sexual discrimination, was finally granted tenure in June 1987. Her victory would not have occurred had it not been for the many students and faculty who worked hard to popularize and win support for her case. The tenure process can be changed by students and concerned faculty. David Noble, speaking here in 1987, recommended preemptive action by students to put pressure on departments before the case of a popular professor comes up. If we desire quality, we must be willing to work for equality in our education.

> **"Scientists have interests, and ... they are not all scientific. The control over science by scientists – the hallmark of the postwar pattern – is increasingly becoming the control over science by the science-based multinational corporations that scientists serve, and sometimes own or direct. The issue here has little if anything to do with the fanciful contest between "basic" and "applied" research and even less with the struggle to defend "pure" science against external control. The issue, rather, has always been, and continues to be, control by whom, and to what end?**
>
> **... Are the interests of the corporate academics compatible with the larger public interest? Are the interests of multinational corporations in harmony with the national welfare? Is private control over so potent a public resource as science still consistent (if it ever was) with meeting the needs and realizing the hopes of the American people? In an age in which scientific knowledge has become so central to the strategies of multinational enterprises, to the domestic and international policies of nations and, thus, to the future of us all, these questions loom larger than ever before."**
>
> **- David Noble,**
> **former MIT professor in STS**

MIT IN CAMBRIDGE

by Steve Fernandez

The history of MIT in Cambridge begins in Boston. Now known for the Prudential building and the Boston Public Library, Copley Square was the original site of MIT. MIT moved to Cambridge in 1911, to get away from the city, so it could expand.[38] Expand it did. Originally occupying 43 acres of Cambridge, the Institute has now grown to occupy over 200 acres, to become one of the largest land owners in Cambridge.

Originally MIT expanded in a relatively vacant area of Cambridge and did not have a negative impact upon the city. However, a drastic change occured during the 1950's under the direction of MIT President Killian. Since that time, MIT has been expanding into already established neighborhoods. In addition, MIT has had a major impact on industry in the area. This has lead to a chilling of relations between MIT and the community of Cambridge, with MIT on the one hand viewing Cambridge residents as an impediment to their progress, and the residents on the other hand viewing MIT as a belligerent Octopus bent on engulfing Cambridge, with its tenticles in the City Council, in federal agencies, in corporations and in banks.

MIT's more aggressive expansion efforts began in Tech Square. Once the home of a low income and minority community and the site of over 3000 light industrial jobs, the area was reduced to 14 acres of vacant land by 1959.[39] [40] MIT then worked with Cabot, Cabot, and Forbes Co. to develop their plans for Tech Square. At that time, the *Boston Sunday Herald* remarked that "this is the first time in real estate history, that an academic institution is participating in a real estate venture with private industrial developers."[41] It would not be the last; on the contrary, it marked a new era for universities in the US.

Shortly following the Tech Square development, MIT began a new campaign to locate NASA in the area. Although the Cambridge Redevelopment Authority was finally convinced to remove businesses and homes by eminent domain, NASA decided to locate elsewhere. By 1970, 200 families had been displaced, thousands of blue collar jobs had been eliminated, and in their place remained 24 acres of vacant land.[42]

This led to plans for a new project, Kendall Square. In the early 1970's, Cambridge residents put pressure on the City Council to establish a Task Force to plan the development of the Kendall Square area. Meanwhile, MIT began to develop its own plans and put pressure on the City Council to accept these plans.[43] MIT let the City Council know that if the MIT plan was not accepted, the city would not be able to use the federal money MIT got for development.

By a 5 to 4 vote, the City Council voted in the fall of 1974 to accept the MIT plan over their own Task Force's plan for Kendall Square.[44] The pomp and decor of Kendall and Tech Squares today stand in stark contrast to the low-income community which they replaced.

MIT's most recent expansion project targets Cambridgeport. MIT's aggressive land buying campaign there began in 1969 with the takeover of the Simplex Wire and Cable properties. Since then, MIT has purchased and removed or relocated hundreds of businesses and housing units from the area targeted for its investment program. In the process, scores of people had to leave their homes, and over two thousand industrial jobs were lost to the community. Structures that weren't immediately bulldozed were allowed to deteriorate to near ruin, as MIT cynically planned to make the area so blighted that its own private "urban renewal" scheme could proceed without opposition.

MIT Buys Green/Blanche St. Houses; Leaves Them to Rot

In 1968, MIT clandestinely purchased two square blocks, including houses, at Blanche and Green Streets. To conceal this purchase, MIT bought the property through a trust to which MIT is beneficiary, and leased the houses back to the original owner on the same day. The tenants were never aware that MIT had become their new landlord.

After the purchase, no repairs were made on the properties, which began to deteriorate. In September of 1970, the property manager bluntly informed the tenants that "the bulldozers are coming the next week." Unaware of their rights, two Greek couples and an elderly couple who had lived on Blanche Street for 30 years left.[45] Then, in October, salvage crews were sent to the buildings to remove space heaters and other appliances. These crews vandalized an occupied unit, kicked holes in the walls, and destroyed the front steps.

Following this incident, the remaining tenants discovered that MIT was their true landlord. They held meetings with MIT to get MIT to repair the buildings which had been neglected and then vandalized by MIT's workmen. MIT did very little to help the tenants, and told them that the buildings would have to be demolished out of concern for the occupants. ('We had to destroy the village in order to save it.')

This disgraceful behavior attracted the concern of MIT student and faculty groups. These groups raised strong objections to MIT's conduct and demanded that MIT be a responsible landlord and repair the buildings.[46] As a result of such pressure, MIT was forced to repair the damages.

MIT kept a low profile until August 1979, when it began a new effort to evict tenants. Some bowed to the pressure and moved. In January 1980, the Cambridge City Council voted a moratorium on MIT's evictions at Blanche street. In March of 1980 the City Council voted a one-year moratorium on MIT's purchases in the Cambridgeport Industrial District.[47]

In 1985 MIT made its final move by seeking to evict four remaining occupants on Blanche Street. After over two years of hearings, a Cambridge Rent Control Board report recommended strongly against MIT's request, stating:

> "MIT has deprived the citizens of Cambridge of these critically needed housing units, and by its neglect has contributed to the blight of the community."[48]

The hearing examiner's report found that MIT had vandalized several units and left them unoccupied for up to 8 years. Cambridge rent control law makes it a misdemeanor to purposely withdraw rental housing from the market.

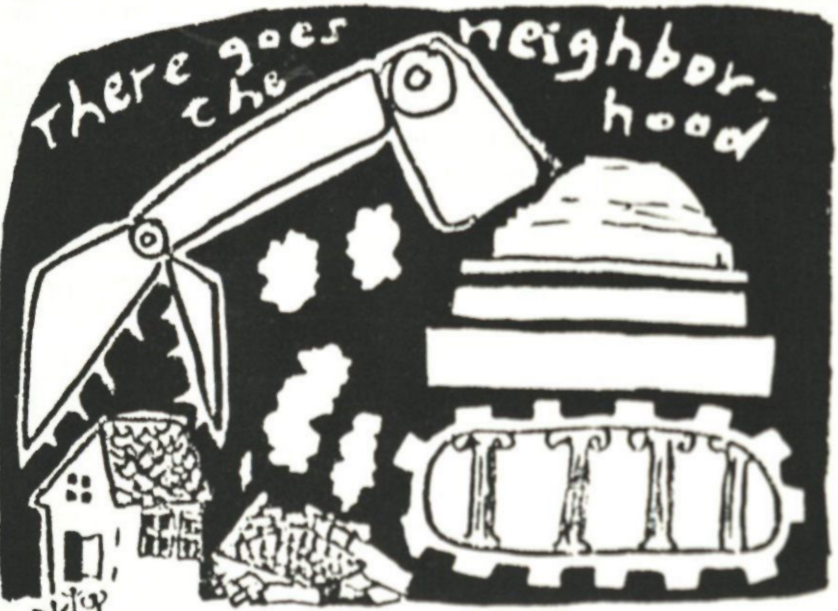
In February 1988 the Rent Control Board found MIT guilty of "flagrant violation" of the Rent Control ordinance and recommended civil prosecution against MIT. The report recommended that MIT be fined, in accordance with the ordinance, $500/day/unit for every day of violation, and that it be required to build 65 additional rent contolled units within the new University Park.

Not surprisingly, MIT refused to accept the decision, maintaining that its long-touted plans to demolish these buildings for a luxury hotel development placed it above the law. Thus, despite its prolonged and arrogant disregard for the law and the general welfare of the city, MIT was able to make a deal with the Rent Control Board. In a bizarre sell-out, the Board granted permission to demolish the six Green/Blanche Street units in "exchange" for MIT's opening six new rent control units (i.e. as "punishment"). Cambridge residents are now appealing the case, hoping that MIT does not demolish the units before the case is decided in court.

Today, twenty-five acres of vacant lots have replaced a once-thriving neighborhood; people in MIT controlled housing are fighting eviction and demolition of their homes; and neighboring residents are compelled to take a stand against the powerful Institute to preserve the integrity and diversity of their communities. The so-called "University Park" development proposed for the Simplex land represents a severe threat to the people of the city and demonstrates a refusal by MIT policy makers to respect the needs of their neighbors. Though disguised as a private commercial development, the project is MIT-owned and MIT-controlled all the way. MIT is leasing its land to a developer, but retains final approval rights of all structures to be built and first option to buy them when the lease expires.

At present the project is being developed. The MIT plan calls for the creation of about two and a half million square feet of office buildings, a luxury hotel, research labs, and parking garages, with some housing and retail . This plan is in direct opposition to often-voiced community proposals, which call for a priority on new housing and light industrial space to replace what MIT has taken from the community. MIT's developer, Forest City Enterprises, admits in its Environmental Impact Report that this huge Kendall Square-like complex would generate virtually insoluble traffic and environmental problems for the city. At the same time, Forest City vows that it will not pay for the estimated ten million dollars worth of "mitigation" costs to minimally alleviate the disastrous consequences of the development — costs which will otherwise be borne by city and state taxpayers. The influx of thousands of affluent professionals attracted to the development will severely worsen the city's acknowledged housing crisis. People of moderate means throughout Eastern Cambridge will be displaced by condo-ized technoyuppies as rents, property values and taxes soar.

In every case where community residents have voiced opposition to MIT's plans, MIT's has ignored them, using its substantial political and economic clout to manipulate the city government to further its own agenda and painting the opposition as irresponsible extremists. Apparently, it is extremist to stand in MIT's way by opposing the decimation of your neighborhood.



Homelessness and 'Tent City'

by Steve Penn

Like many American cities in the past decade, Cambridge has undergone a period of extensive development and economic growth that has been paralleled by a rapid increase in poverty and homelessness. This dual trend may at first seem contradictory, but historically when the economy has grown rapidly, this growth fails to benefit the working class, except perhaps for a slight "trickle-down" effect. In the 1880's and the 1920's, bursts of industrial expansion did not correspond to increases in standards of living. Inflation of prices and prop-erty values, with little or no wage increase, makes the working class poorer.

Gentrification, often said to revitalize an area, can serve to further impoverish the community. A community is dependent on its housing and businesses. Gentrification creates higher cost housing and businesses that often draw employees from outside the community. In Greater Boston, the recent wave of gentrification has cleared out poorer neighborhoods and replaced them with businesses and houses targeted for the yuppie class. In areas where people go month after month barely making ends meet, the disruption and burden of gentrification can force the residents out onto the streets. There is more profit to be made from the yuppie population, so developers have been eager to "clean up the city" by pushing out the poor, largely nonwhite community to make way for a new, clean clientel.

Much of the new money entering the economy is the loan that the government has taken out, in the form of $1 trillion of added budget deficits. This money is primarily channeled into the defense establishment and high tech industry. MIT, "the sixth wall of the Pentagon," has used this influx of funds to develop the surrounding areas of Cambridge. As discussed in the previous article, MIT's "revitalization" has destroyed low-income houses, increased rents and property taxes, removed the traditional industry, and brought in a new work force for the high tech businesses. The result: a growing wave of homelessness in its wake.

The new homeless are not drunken, drug-ridden, crazy sops — the stereotypical homeless person. Rather they are the young families who were just getting by, but have been pushed out into the streets by rent increases. In Massachusetts, a typical homeless person is a 12 year old daughter of a single mother. In the Commonwealth alone, there are over 100,000 poverty-stricken mothers.[49] The city services estimate that there are 5,000-10,000 homeless in Greater Boston. These estimates vary widely since it is difficult to count an invisible population. Service providers must also contend with the fact that area shelters are falling victim to development and condo conversion. (Two large shelters and a drop-in center were gobbled up this past spring.)

The sad reality is that in a society that equates a person's value with her income, the homeless person labels herself worthless. Internal brands are a much harsher judgement than society's labels. When a person fails to believe in herself, there is no need for external repression. She is her own prisoner.

Fortunately, there exists a vocal minority of homeless who realize that it is the developer (or in our case the university) who is bulldozing the houses, raising rents, and pushing out the old community to make way for "progress." This minority have begun to speak out in many cities against gentrification.

Last year two dozen homeless people attending a rally against MIT's Simplex development in Cambridgeport joined the community in a sleep-in on the controversial land. When the community protesters dispersed the following day, the homeless decided to remain and form an encampment in protest of MIT's development plans. Their encampment, located across the street from three houses that MIT had illegally evacuated and abandoned, soon began to attract the media's attention.[50]

The story of the homeless, who endured the cold and snow to challenge a world-respected university that was illegally destroying houses, spread from Los Angeles to London. The media focus paralyzed MIT and forced them to adopt a wait-and-see policy in hopes that the cold would soon drive the homeless away. But the cold weather only served to futher galvanize the city behind the protesters. The Cambridge City Council advised MIT against taking any steps against the encampment, and they called on President Gray to begin negotiating with the homeless. MIT did not reply.

The City Council voted the following week to provide Tent City with heated trailers and chemical toilets, provisions that would allow the homeless to survive the winter at the encampment in relative ease. The thought that the protesters would be able to continue their homestead through the winter was unacceptable to MIT. A continued protest had the potential of derailing plans to build a luxury hotel on that property. Ignoring the sentiment of Cambridge, the Institute struck quickly and forcefully. On Friday, November 20, in the predawn rain, MIT police violently evicted the protesters, arresting ten people and injuring two.[51]

Despite the flurry of bad press that MIT received after the eviction, the Institute wielded enough political leverage to keep its development strategy intact, with only the additional promise of 300 more units of housing, none of which would be accessible to the people who had fought for it.

Fortunately, continued action by the Tent City residents and their supporters managed to secure cramped apartments for 12 of the squatters. From this stable base, seven were able to move into rented apartments, and four have stable jobs.[52] The remaining 17 have rejoined the sea of Boston homeless.

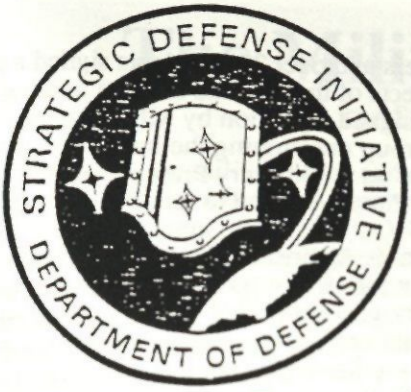
MIT AND LABOR

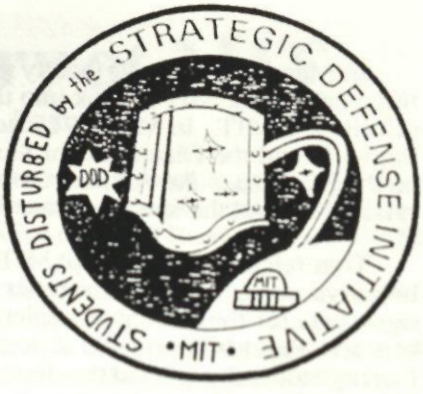
In 1986 MIT stole thousands of dollars from 68 food service workers who belong to Local 26 of the Hotel and Restaurant Workers Union. The Institute broke its contract with Local 26, terminating the medical, dental, and pension programs of people who, together, have given MIT 513 years of loyal service. How? When the workers' last contract expired, MIT punted the management of its food service over to ARA Associates. Without any change of workers or their responsibilities, their pensions and benefits were slashed. This cost cutting measure is similar to selling loans. However, we are not talking about loans. We are talking about individuals who have invested years here — 10, 15, 25 years: some have been working here for longer than you or I have been alive. We're talking about wives and husbands working under the Institute's guarantee of (at least a modicum of) security for their families and futures. This is a major assault on their lives.

How does MIT get away with this? Simple: they just do it (with help, of course, from inequities and loopholes in the US legal system). And remember, MIT is not some peculiarly abstract, yet nevertheless reified entity that "takes action": MIT is people — individuals sitting in offices and conference rooms — deciding to mess up other people's lives and calling it fiscal

What allows these people to be so detached from the consequences of their actions has a lot to do with the detachment of groups in society: would you cut your own relatives off their pension? No. But if it's people you don't relate to, a certain type of people who always seem to be getting the bad breaks, people you don't live with, talk to or have to look in the eye, then it's much easier to look the computer in the screen instead and make it maximize your own dollars.

The workers lost this battle, but all hope is not lost for union representation of workers at MIT. In a similar food service contract dispute at Harvard, the Union won. It won because the students mobilized a massive struggle together with the union. And just this spring at Harvard, the previously unorganized clerical and technical workers narrowly voted to approve the new "Harvard Union of Clerical and Technical Workers" in an election whose results are still being disputed. Because they have student support, the Harvard workers are likely to continue winning. Any MIT clerical workers and faculty interested in forming a new union at MIT are encouraged to contact the Alternative News Collective so that we can put you in touch with other interested workers and organize student support here.




STUDENTS DISTURBED by the STRATEGIC DEFENSE INITIATIVE
•MIT•
DOD
MIT

Campus Opposition to the Strategic Defense Initiative

by Rich Cowan

On March 23, 1983, President Ronald Reagan announced an ambitious new project: the United States would attempt to build an impenetrable orbiting shield to "render nuclear weapons impotent and obsolete." By the spring of 1985, money from the Strategic Defense Initiative (SDI), known as 'star wars', began making its way to MIT. Students and faculty were quick to point out the problems that an SDI system would create for our security and the program's potential to further militarize science at MIT.

To most physicists at MIT, Star Wars is viewed as a fantasy. (Some have called it "Reagan's wet dream.") The United States can't stop shipments of drugs coming into this country with thousands of border patrols; how could we possibly stop within seconds 10,000 warheads and thousands of additional decoys, fired simultaneously by the Soviet Union? As it turns out, SDI does not even try to stop all the missiles. It only tries to stop ballistic missiles that go all the way into orbit before coming back to earth. Cruise missiles, which the Soviets have recently developed in response to deployment by the US, could be fired just off the US coast and would be totally untouched by SDI.

Furthermore, SDI would be expensive. Even the downscaled versions (i.e. partial shelds) recently proposed by the Pentagon would cost at least half a trillion dollars. For much less than a half trillion, the Soviets could overwhelm any SDI system the U.S. could devise. For example, MIT Professor James Melcher pointed out that a bucket of sand placed in retrograde orbit would completely ruin the highly polished space mirrors that would be necessary to direct space lasers. The real reason for Star Wars, it seemed, was to provide a huge pork-barrel project for military contractors. MIT lined up for the pork.

In March of 1985, 40 faculty members and over 200 students signed a petition calling for MIT to look into the effects of the national shift on funding priorities at MIT. In May, 791 students signed a petition by MIT Student Pugwash and the Disarmament Study Group questioning the Institute's silence on the SDI issue. An Ad Hoc Committee on the Military Presence at MIT was established and the specific issue of SDI funding added to its charter.

That fall an ad hoc group, MIT Students Against the Strategic Defense Initiative, raised campus awareness about the 'star wars' program and collected signatures for the nationwide scientists' boycott of SDI.[53] 118 faculty members and about 600 students in science and engineering signed the pledge. Twenty students picketed the director of the Strategic Defense Initiative Organization before a speech at Faneuil Hall, receiving local TV coverage.[54]

In the spring of 1986, students continued to apply pressure. The newly formed Science Action Coordinating Committee held a series of three rallies on military research and Star Wars. Professors and students spoke on the Lobby 7 steps.[55] Students proposed a cap on SDI funding at MIT, openness of research contracts, and conversion of DOD work to research funded by other agencies.[56] MIT's Provost John Deutch responded that "the specific measures included in your proposal would not be in the interest of the Institute."[57] Of course, students and faculty had no say in determining these interests.

Meanwhile, the Committee on the Military Presence at MIT completed a lengthy report expressing concern about: 1) possible classification of theses and other research and restricted opportunities for non-US nationals, 2) increases in DOD funding compared to other sources and high SDI funding potential, and 3) lack of information in the face of widespread student interest.[58]

In response to a faculty request, President Gray appointed a second committee to make a more detailed study of the military impact at MIT. The MICAR (Military Impact on CAmpus Research) Committee, first chaired by Professor William Brace and now headed by Professor Arthur C. Smith, has failed to release a single word of findings after meeting for almost two years.

The initial splash of campus opposition to SDI has taken much of the wind out of the SDI program. The drain of the program — on civilian technology that could have a social benefit or could help reduce the trade deficit — continues. Current proposals for SDI provide no hope of genuine defense, but have some potentially dangerous offensive "spinoffs." The threat caused by SDI in combination with offensive nuclear missiles may only encourage the Soviets to modify their arsenal in ways that increase the chance of accidental nuclear war. (The recent INF arms control treaty fails to address this serious danger.)

In the nuclear age, building more weapons won't solve anything. To fight militarism, we must work not for "peace shields," but for disarmament.

The Military at MIT

by Steve Farber

At MIT, the military is far and away the most accessible source of research funding. Faculty in various departmental seminars on this topic praised the DOD (Department of Defense), ONR (Office of Naval Research), and DARPA (Defense Advance Research Project Agency) for consistently offering "enlightened" funding for novel or more risky ventures. In contrast, the NSF (National Science Foundation) and NIH (National Institute of Health) were deemed too "conservative" and difficult to deal with. For example, while lavish weapons-related contracts are offered for multi-year projects, NSF funding tends to be limited to short-term projects with unguaranteed renewability. For a researcher or student interested in several different areas, some of which get funded consistently and solidly while others do not, it is reasonable to assert that his or her research priorities and specializations will change to accommodate the funding. Thus, the whole sphere of scientific inquiry skews toward the military. By continuing to acquiesce to greater and greater military influence, the University inexorably relinquishes control over the direction and future of science. The facade of offering students an "education" and researchers a "career" legitimizes this erosion, and expedites the militarization of society as a whole.

If we are to prevent our society from being dominated by the military, this process must be counteracted. A first step could be to limit the total support coming from any one source. A funding cap would ensure balance, encouraging the broader development of knowledge in all fields. While some might claim that balance infringes on academic freedom, it is obvious that the ubiquitous dollars dangled by DOD have strings attached, and that the DOD-funded researchers must toe the DOD line.

Is this academic freedom? Is it academic freedom when researchers are limited to DOD goals and have to go scrambling to find other projects? Is it academic freedom when whole departments and disciplines are dependent on weapons policies? Does academic freedom exist in a cloud of self-censorship, retroactive classification, and usurpation of promising fundamental technologies by the Pentagon?

At the same time that the MIT comunity works toward balance, we must remember that balance as an end hardly improves the overall situation: balance can gloss over the lethal work, thus furthering military entrenchment at MIT. Balance should therefore be part of a longer-term process of reorienting science so that social responsibility is a norm and not a quaint extravagance.

Biological/Chemical Warfare at MIT

by Steve Farber and Tom Hsu

Concern about the development of biological/chemical warfare agents has increased recently. At MIT, this pertains to research conducted by various faculty into the toxicity of mycotoxins. A mycotoxin is a poison typically produced in nature by living organisms like fungi, and used as an agent of biological/chemical warfare. The *New York Times* has recently named MIT as a leader in biological warfare in connection with its mycotoxin toxicity research.[59]

The Brace Committee responded to this news by investigating the presence and/or level of bio warfare research at MIT. At first, members of the committee were told by the administration that very little of this type of research was being done at the Institute. The administration emphatically rejected the *New York Times* report, explaining instead that faculty in the Department of Applied Biological Sciences were doing mycotoxin research and that mycotoxins were also the leading contaminants in grain. This was meant to imply that the focus of this research was non-military.

One of the key justifications for conducting this type of research is the claim that mycotoxins are really a food safety issue. However, if this were the case, then the research would be funded by the US Department of Agriculture; it is not. A recent article in *Scientific American* addressed the inconsistency:

"The depth of the Pentagon's concern about the military rather than the natural threat from biological agents...is suggested by the titles of some recent Pentagon 'threat assessments':

> 'An Evolution of Entomological Warfare as a Potential Danger to the United States and European NATO Nations,'
> 'Biological Agent Delivery by ICBM,' and
> 'Biological Vulnerability Assessment: the U.S. East Coast' "[60]

Careful scrutiny of the *MIT Report of the Office of Sponsored Programs* for 1985 revealed that approximately $1,550,000 has been provided by the Army to support a mycotoxin research program at MIT over the three year period from 9/82 - 7/85. This averages to $515,000 per year. In 1986, this figure increased to $737,000, a 43% increase. This brings the total support level to $2,300,000; the relevant data are summarized below:

Biological/Chemical Warfare Research at MIT, 1982-6

SUPERV.	OSP#	DEPT	SPON	DATE	TOTAL $$	YRLY $$
Marletta	92831	ABS	Army	9/82-7/85	169,991	56,664
Marletta	96810	ABS	Army	7/85-7/86	89,693	89,693
Newberne	92829	ABS	Army	9/82-7/85	64,870	21,623
Newberne	92834	ABS	Army	9/82-7/85	752,429	250,810
Newberne	92835	ABS	Army	9/82-7/85	70,440	23,480
Newberne	96808	ABS	Army	7/85-7/86	64,937	64,937
Newberne	96812	ABS	Army	7/85-7/86	362,068	362,068
Newberne	96813	ABS	Army	7/85-7/86	34,468	34,468
Wogan	92830	ABS	Army	9/82-7/85	136,173	45,391
Wogan	96809	ABS	Army	7/85-7/86	57,764	57,764
Buchi	92832	Chem	Army	9/82-7/85	145,988	48,663
Roush	92833	Chem	Army	9/82-7/85	205,494	68,498
Roush	96811	Chem	Army	7/85-7/86	128,008	128,008

Sum of yearly averages for contracts active in fiscal 1985 = $515,129
Sum of yearly averages for contracts active in fiscal 1986 = $736,938

This research would most probably fall under program element 63721A, "Chemical-Biological Protective Material Concepts" of the Army research budget.[61] In fiscal year 1986, $900,000 was allocated for this program as opposed to $1,600,000 for fiscal year 1987. Thus, if the research at MIT is part of this program, it comprises approximately 50% of the Army's research in this area.

The funding for mycotoxin (trichothecenes) research in the departments of Chemistry and Applied Biological Sciences took a path through the Provost. Professor Marletta stated that he was called by the Provost, Professor Deutch, who knew of the Army's interest. Professor Marletta also stated that the Provost told him that a Pentagon committee, of which Professor Deutch is a member, was recommending funding this type of research. Provost Deutch chaired the Defense Science Board Task Force on Chemical Warfare and Biological Defense in 1985.[62]

The mycotoxin studies were intended to "define the toxicity of 2 trichothecene mycotoxins, anguidine and nivalenol, in rats and dogs..." and "develop an intervention program to protect humans from the acute effects of trichothecene mycotoxins." Discussions with Professor Marletta and Professor Wogan confirmed that all participants had long-standing interests in microbial toxins. The unusual toxicology and the possibility for application to bone marrow disorders was cited as a primary motivation. Although the military applications of this research was clearly recognized, the Army imposed no restrictions on academic freedom. The consensus (among the researchers) was that this was an opportunity to do some interesting science which might not have been funded otherwise.

However, Professor Marletta did say that "looking back I would not do it [take money from the Army for this kind of research] again." He also commented that the "stuff is so damn toxic" that he did not consider it useful for humans.

It is important to note that the mycotoxin research began at approximately the same time that the State Department began alleging that the Soviets sprayed trichothecenes in Afghanistan. These accusations have been disputed by many reputable scientists. Research teams lead by Matthew Meselson at Harvard[63] and by the Canadian Government both found that the trichothecenes were probably produced by a fungus that grew on bee faeces.

As scientists, we must examine mycotoxin research within this science policy framework to properly assess its impact.[†] What role, if any did MIT play in the science policy decision to pursue this form of research? This is an instructive example, since the biological sciences have traditionally been supported from non-DOD sources.

[†] The Committee for Responsible Genetics, a Boston-based non-profit organization concerned with the social effects of new genetic technologies, is circulating a pledge in which biologists and chemists refuse to participate in research and development of biological weapons. If you would like to sign or circulate this pledge, please contact Nachama of CRG at 423-0650.

Investigating MIT's Pentagon Connections

by Rich Cowan

Since 1976, MIT and other research universities have been the prime targets of a bipartisan effort to re-establish the university-DOD ties that had eroded as a result of student reaction against the Vietnam War. Prominent in the effort to strengthen the academic links with the Pentagon was the Science Advisor's Panel on Basic Research in the Department of Defense, headed by Carter's science advisor Frank Press in 1978.[64] Three panel members have had strong MIT connections. 1) Press is a former MIT professor, chairman of the National Academy of Sciences, and recent appointee to the Lincoln Laboratory Advisory Board. 2) Dr. John Deutch, director of SAIC and MITRE Corporation (major DOD firms), member of the Defense Science Board and chair of the DSB Task Forces on Chemical and Biological Warfare and the Midgetman Missile, is the MIT Provost. 3) Finally, Dr. David Saxon, a consultant to Ford Motor (a major DOD contractor) who had responsibility for Lawrence Livermore and Los Alamos Labs as the president of the University of California, is the Chairman of the MIT Corporation.

A natural consequence of the panel's conclusion that the DOD basic research program was "substantially below the level needed to meet DOD needs" was an explosion in MIT defense contracts, whose dollar total almost doubled within two years. Even more seriously, the sudden militarization of "basic research" set the preconditions for a more overt mission-oriented militarization during the Reagan administration, which at MIT has included $90 million in Star Wars research, a quadrupling of the MIT Lincoln Laboratory budget to $415 million in F.Y. 1988, surprising MIT connections to laser weaponry, first-strike nuclear weapons programs, the National Security Agency, biological warfare, counterinsurgency radar for Central America, and five newly announced "University Research Initiative" multi-million dollar contracts.

The MIT Science Action Coordinating Committee (SACC) has studied MIT's military involvement since 1986. The key portion of SACC's investigation is studying how MIT's research feeds into DOD requirements. MIT professors often claim that DOD work is "pure research" that has no immediate applications. SACC's investigation demonstrates that these professors are either naive, lying, or silent because of security clearance requirements. Because the military terms are either censored out or insidiously merged into the technical jargon, the military orientation may not be obvious. But taking a look at the larger picture, it is clearly there.

DOD Funding Mechanisms

Most DOD research falls under the direction of four government agencies, the Defense Advanced Research Projects Agency (DARPA), the Office of Naval Research (ONR), the Air Force Office of Scientific Research (AFOSR), and the Army Research Office (ARO). SACC sent Freedom of Information Act (FOIA) requests to all of these agencies to find out the *DOD program elements* and *work-unit summaries* for DOD contracts.

The program element number (63314F is one example) identifies each research program within the 50-page DOD Research, Development, Test, and Evaluation Budget. This report, called the "R-1 Summary," is now carried in the MIT Dewey library (a more final, but censored version is published in the November *Defense Electronics* magazine). Work unit summaries are filled out by DOD program managers to describe the military relevance of Pentagon-sponsored research. However, these summaries are rarely shown even to the professors conducting the research.

SACC believes that the information we are requesting from the United States government should be kept on file by MIT so that students and faculty may easily access it. Indeed, if the Institute is serious about its plans to promote consideration of social responsibility, students must be able to see the intended use of their work by the DOD (as well as other agencies). If we have difficulty obtaining the requested information from the government, we will expect MIT to help us get it. We will also ask MIT to begin carrying the government documents on DOD research in its libraries. SACC has other information, besides the data on contracts, that may help in answering these questions.

Other questions that you may wish to investigate include:

- How are DOD's technical needs related to US foreign policy goals?
- How does faculty consulting at DOD firms affect campus research?
- What role do faculty members play in shaping US research policy?
- How are military values incorporated into the MIT culture?
- How can concerned scientists and engineers gain control over the ultimate uses of their work?

Students who want to look at some of these issues are encouraged to contact Rich at 497-0870 or Steve at 738-5624. Some of you may want to do research papers for classes on the subject of the impact of the military on academia or on the US economy. Even UROP projects (mostly for credit) can be arranged. We will help you find professors and overcome the limitations of the MIT library; just ask!

What SACC does in a Nutshell

We **get concerned people together**

to hold meetings and discussions that explore our place in society, collectively deciding what questions we want to ask, and then assigning responsibility to keep people informed so that they can participate

in **finding things out**

through letters, phone calls, library research and, in extreme cases, sit-ins and confrontations

then **make people aware of what we discover**

through meetings, leaflets, open forums, teach-ins, creative actions, talking to friends, going into the dorms and fraternities and showing films, etc.

thus **changing the MIT climate**

by bringing up issues that are important yet seldom raised (because they are so controversial), so that people will feel comfortable discussing them in the open

to **define alternative paths for students and faculty**

so that they will approach career decisions with a consciousness of the impact of technology and a commitment to try to make their lives matter in a socially constructive way

thus **making people receptive to change**

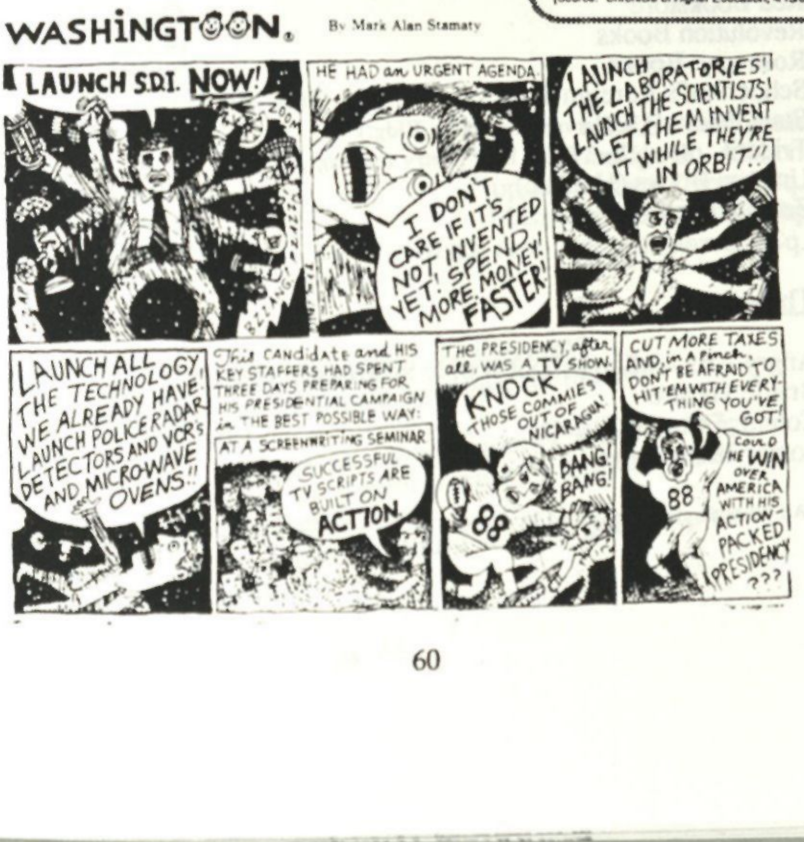
to convert our militarized scientific enterprise into one which serves the long-term needs of all people, rather than the desires of a few individuals whose values are shaped by the goals of domination and profit.

Top 35 Non-Profit DOD R&D Contractors,1987

(figures in millions)

MIT	$407.64
Johns Hopkins Univ	$354.92
MITRE Corporation	$347.53
Aerospace Corporation	$338.92
Draper Laboratory	$164.67
SRI International	$67.69
IIT Research Institute	$65.65
Institute for Defense Analyses	$57.37
Rand Corporation	$43.42
Carnegie Mellon University	$41.51
University of Texas System	$39.04
Pennsylvania State University	$38.99
Stanford University	$37.02
Battelle Memorial Institute	$34.67
Georgia Tech	$33.29
University of California	$33.08
University of Southern Cal	$32.81
Analytic Services. Inc.	$22.74
Riverside Research Institute	$20.31
University of Washington	$19.62
University of Dayton	$18.98
University of Illinois	$10.01
Utah State University	$14.83
Logistics Management Inst.	$14.41
University of Maryland	$13.65
Woods Hole Oceanographic Inst.	$13.23
New Mexico State University	$13.22
Southwest Research Institute	$11.88
University of New Mexico	$11.35
Cornell University	$11.19
National Academy of Sciences	$10.56
University of Massachusetts	$9.93
Hudson Institute	$9.46
Research Triangle Institute	$8.95
Purdue University	$8.62

[Source: *Chronicle of Higher Education*, 4/13/88]


WASHINGTOON.
LAUNCH S.D.I. NOW!
ZOOM
HE HAD an URGENT AGENDA.
I DON'T CARE IF IT'S NOT INVENTED YET! SPEND MORE MONEY! FASTER!
LAUNCH THE LABORATORIES!! LAUNCH THE SCIENTISTS! LET THEM INVENT IT WHILE THEY'RE IN ORBIT!!
LAUNCH ALL THE TECHNOLOGY WE ALREADY HAVE. LAUNCH POLICE RADAR DETECTORS AND VCR'S AND MICRO-WAVE OVENS!!
This CANDIDATE and HIS KEY STAFFERS HAD SPENT THREE DAYS PREPARING FOR HIS PRESIDENTIAL CAMPAIGN in THE BEST POSSIBLE WAY:
AT A SCREENWRITING SEMINAR
SUCCESSFUL TV SCRIPTS ARE BUILT ON ACTION.
THE PRESIDENCY, after all, WAS A TV SHOW.
KNOCK THOSE COMMIES OUT OF NICARAGUA!
BANG! BANG!
88
CUT MORE TAXES AND, in A Pinch, DON'T BE AFRAID TO HIT 'EM WITH EVERYTHING YOU'VE GOT!
COULD HE WIN OVER AMERICA WITH HIS ACTION-PACKED PRESIDENCY ???
88

By Mark Alan Stamaty

Section III: Resources for Recreation and Organizing

Places To Go, Things To Do

Bookstores

AGS Asian Collections and Asian Books	12 Arrow St. Harvard Sq.
Avenue Victor Hugo Bookshop	Newbury St. Boston
Bookcase (used)	33 Church St. HarvardSq.
Brattle Bookshop	West St., downtown Boston
Glad Day (Lesbian and Gay Lit)	Back Bay, Boston
Harvard Bookstore	Mass. Avenue, Harvard Sq.
New Words (Women's)	186 Hampshire St. Cambridge
Pathfinder Books	605 Mass. Avenue, Boston
Reading International	Church St. Harvard Sq.
Red Bookstore	Green St. Jamaica Plain
Revolution Books	14 Eliot St. Harvard Sq.
Roseway Books	Centre St. Jamaica Plain
Schoenhof's Foreign Books	76A Mt. Auburn Street, Cambridge
Starr Books (in Harvard Lampoon Bldg.)	Mt Auburn St. Cambridge
Trident (South End Press bks, poetry readings, cafe...)	Newbury St. Boston
Unicorn Books (Holistic)	1644 Mass Ave Lexington
Zembla Books	Davis Square, Somerville

Theatres

Angry Arts — films about people in struggle 625-9279	Cambridge
Brattle Theatre	Brattle St. Harvard Sq.
Coolidge Corner Theatre	Coolidge Corner, Brookline
Somerville Theatre	Davis Sq. Somerville

(All other theatres are owned by General or USA cinemas and play the same current run stuff.)

Restaurants and Clubs (not a complete list)

Algiers — expensive middle eastern food Brattle St. Harvard Sq.
Asmara — Ethiopian food near MIT Mass. Ave, Central Square
Downtown Cafe — natural foods 12 Lagrange St. Boston
East Coast Grille — excellent ,wood grille 1271 Cambridge St., Camb.
Green Street Café — cajun food, sandwiches Green Street, Cambridge
Ground Zero — dance club with abrasive punk Mass. Avenue, Central Sq.
India Pavillion — better than other local Indian Western Ave, Cambridge
Latino's — food and ethnic bands Brookline St. near Central Sq.
ManRay — new wave dance club BrooklineSt. near Central Sq.
Middle East Restaurant — inexpensive, and music too Central Square
Mississippi's — soup, salad, sandwiches Kenmore Sq.
Modern Times — home cooked food Hampshire St. near Draper Labs
Molly's — live bands Brighton Ave Allston
Nameless Coffeehouse — local music, free, Saturday 8pm Harvard Square
Nightstage — upscale, with live bands Main St. near Central Sq.
The Rat — Frequent Live Bands Kenmore Sq.
Royal East — Good Chinese food near MIT Main Street, Cambridge
Ryles — live music, mostly jazz Inman Sq.
Santori's —Homemade, Natural foods) 166 Harvard St. Allston
Stock Pot — good soup and salad JFK St. in the Galleria Harvard Sq.
Taha — vegetarian café Prospect and Broadway Sts. near Central Sq.
TT the Bear's — live bands Brookline St. near Central Sq.
Western Front — live bands, mostly reggae Western Ave. near Mem. Dr.

Alternative Food Stores

Arlington Food Coop — Lake St. Arlington
Boston Food Coop — Cambridge St. Allston
Bread and Circus — Propsect St. near Central Sq.
Cambridge Food Coop— Mass Ave near Central Sq.
Cambridge Natural Foods — Mass. Ave. just past Harvard Sq.

QUESTIONS:

1. Why is smoking in N.J. redundant?

2. Why say no to drugs but yes to neutron bombs?

3. Why is it illegal to carry firearms around MIT, but it is perfectly fine to develop cluster bombs used against the Vietnamese?

4. How many pockets would a pick pocket pick if there was no poverty?

Concerned groups on campus and in the nearby community

Amnesty International, MIT Chapter MIT Room 2-333
Educates people about human rights violations around the world.
contact: Richard Koch, x3-7826 or x5-9550.

AWS/Pro-Femina Student Center, Room W20-447
Organized to represent Women's interests at MIT.
contact: Kim Stopek at x5-6191.

Black Rose Collective P.O. Box 2684, Jamaica Plain 02130
Sponsors a lecture series as a forum for anarchist and related ideas.
contact: Liz Highleyman at 523-7831 or x3-6693.

Black Students' Union Walker Memorial, Room 50-105
Represents black students at MIT.
contact: Jason Vickers, East Campus, x5-6279.

Boston Student Action Network P.O. Box 1050, Cambridge 02142
A network of activists working to develop the student movement locally.
contact: Phil at 983-0991.

Coalition Against Apartheid (CAA) MIT Room W20-401
Educates people on Apartheid and works for MIT's divestment.
contact: Steve Penn x3-1521.

Endowment for Divestiture (EFD) MIT Room E52-429
Organized to bring alumni/ae pressure for divestment.
contact: Phil Katz at 623-2969.

GAMIT (Gays at MIT) MIT Room 50-306
Educates the student body and supports gay and lesbian students.
contact: Tim Eicher at x3-5440.

Habitat for Humanity, MIT chapter 312 Memorial Drive/ W2A
Tries to build and obtain housing for low-income people.
contact: Betsy Draper, x3-2328.

LuCHA Walker Memorial, Room 50-301
Concerned about issues affecting Mexican-American students at MIT.
contact: Ricardo Rodriguez at x5-9625.

Local 26 (Food Service Workers) 58 Berkeley St., Boston, 02116
Fighting to insure worker's rights at MIT. Union office: 423-3335.

MIT Alternative News Collective MIT, Room 26-567
Publishes *The Thistle*, an alternative paper working to humanize MIT.
contact: Steve Penn at x3-1521 or 782-7259.

MIT Animal Rights Forum MIT, Room W20-401
Tries to raise awareness in order to curtail mistreatment of animals.
contact: William Snyder, x3-5009.

MIT Arms Control/ Disarmament Study Group
This organization used to be active, but all the members graduated. If you want to reorganize the group from scratch, please leave a message for Sarita at her domitory desk, x3-2871.

MIT Committee on Central America (COCA) MIT, Room E17-434
Holds meetings, lectures, and actions on US policy in Central America.
contact: Charlie Welch, 783-1668 or x3-2422.

MIT Hunger Action Group MIT, Room W20-401
Volunteers at soup kitchens and organizes forums on world hunger.
contact: Irene Skriki at x5-8496 or Janaki Abraham at x5-8492.

MIT Science Action Coordinating Committee Room W20-401
Challenges the social and political forces affecting technology and MIT.
contact: Steve Farber at x3-8023, 738-5624 or x3-6706.

MIT Student Pugwash MIT, Room 2-342
Studies the social implications of science and technology.
contact: Mark Engel at x3-7578 or Carolyn Lee at x3-0484.

MIT Urban Action MIT Room 20A-001
Tries to match MIT volunteers with local community needs in tutoring, etc.
contact: Scott Tang at 864-0312 or x3-2894.

People Against Racism Ashdown, Room 312C
Working to fight racism within MIT and in the nearby community.
contact: Ron Francis at x5-9733 or x3-6802.

Simplex Steering Committee 274 Brookline St., Cambridge 02139
Organized to change MIT's local real estate evelopment plans.
contact: Bill at 491-2933.

Technology for Development
A study group for appropriate technology and Third World development.
contact: Nanthi at x3-5999, Prasanna at x3-8926

[Note: Watch the bulletin boards in the Infinite Corridor — of GAMIT, SACC, COCA, BSU, Women, etc. — for information on meetings and events.]

The WOMEN'S Page

AWS/PROFEMINA

The Association for Women Students/Profemina brings undergraduate and graduate women together to discuss and initiate actions on women's issues at MIT. Originally, the group focused on pornography and sexual harassment on campus. In recent years, Profemina has addressed other diverse issues: reproductive rights, violence against women, and lesbian and gay issues, to name a few. Profemina has also worked with People Against Racism and Science Action Coordinating Committee on issues of mutual concern.

Our group is small and non-hierarchical in nature; every member's input is highly valued. You can call us at 253-8898 for information on future events.

MIT WOMEN'S RESOURCES

Women's Studies (Barbara Schulman)	14E-316	x3-8844
Assistant Dean for Student Affairs (Jackie Simonis)	5-106	x3-4861
Women's advisory group — Inquiries	10-213	x3-5921
Women's forum — Information (I. Barclay)	E19-341	x3-4787
Assistant for women students' interests (L. Roberson)	5-106	x3-4861
MIT Women's League (Admin. asst. A.W. Verhulst)	10-342x	x3-3656

[Note: To find out more about the Women's Studies Program, visit the office above the Humanities Library in 14E-316. You'll also find an informative women's bulletin board and a reading room close by.]

CAMBRIDGE WOMEN'S RESOURCES

Boston Area Rape Crisis Center 99 Bishop Allen Dr., Cambridge	492-RAPE
The Mass. Coalition of Battered Women Service Groups	426-8492
Battered Women's Hotline	661-7203
Cambridge Women's Center 46 Pleasant St., Cambridge	354-8807

WOMEN'S RADIO

"Say It Sister!" is a weekly women's talk show produced here at MIT's WMBR studio. It's on the air Wednesday nights from 7 to 8 pm at 88.1 FM. If you'd like to get involved in its production, leave a message at the WMBR station (in the basement of Walker) at x3-4000.

Printed Media

The *Boston Globe* and the *Boston Herald* are the area newspapers which provide the expected amount and type of reporting on local, national, and international events. And the *New York Times* is, we are told, is the final word on everything, and thus is also available here. There are occasions, however, where we find the staffs of these award winning journalistic wonders somewhat overburdened with all that goes on in the world. To put both yours and their minds at ease, we bring you the following assortment of journals and newspapers to supplement (or perhaps even replace) your regular reading. They can be found at one or more of the well known literary establishments — the MIT Library, Out-of-Town News or Reading International, Revolution Books (Harvard Square), or the Cambridge Food Co-op, to name a few. Many are indexed in the *Alternative Press Index*, located in the reference section of the Humanities Library.

General Politics: Guardian • In These Times • Mother Jones • The Nation • Radical America • Processed World • Utne Reader • Z Magazine

Locals: The Thistle (MIT's alternative campus newspaper) • Subterranean Review (Harvard) • BU Exposure • The Watch (Brandeis) • Gay Community News • Street Magazine • What's Left in Boston • Bay State Banner • Bay Windows • Peacework (New England Friends' Service Committee)

Peace Issues: Bulletin of Atomic Scientists • Defense Monitor • Nuclear Times
Environmental: Environmental Action • Earth First! • Green Perspectives
Science and Society: Science for the People • Genewatch • CPSR Newsletter
Intelligence Exposé: Covert Action Information Bulletin
Exposé on Corporations: Multinational Monitor
Religious Perspectives: Sojourners
Women's Perspectives: Sojourner

Miscellaneous: Akwesasne Notes • ALERT (Cispes) • Alternative Media • American-Arab Affairs Journal • Awake •Black Student • Bad News • Black Flag Quarterly • Black Scholar • Central America Alert • Central America Bulletin • Changing Men • Compulsive Technology • Crime and Social Justice • Critical Inquiry • Cultural Correspondence • Cultural Survival Quarterly • El Salvador Link • Fifth Estate • Guatemala Network News • Honduras Update • Industrial Worker • Issues in Radical Therapy • Kick it Over • Latin American Perspectives • Khamsin • Monthly Review • New German Critique • New Left Review • Nicaraguan Perspectives • Off Our Backs • Open Road • Our Generation • Pacific Affairs Quarterly • Philosophy and Social Criticism • Race Today • Radical History Review • Radical Philosophy • Radical Science Journal • Radical Teacher • Resistance • Review of African Political Economy • Revolution in Africa • Science and Society • Science, Class, and Politics • Selected Ooze • Sinister Wisdom • Social Anarchism • Social Text • Socialist Review • Southeast Asian Chronicle • Southern Exposure • Strike! • Student Bulletin • Womenews • Women and Revolution • Women's Review of Books • World Policy Journal • World War Three

Local Political Organizations

AIDS Action Line Information	Boston	536-7733
American Friends' Service Committee	2161 Mass Ave. Cambridge	661-6130
Amnesy International USA	58 Day St. Somerville	547-9295
Bos. Alliance Against Registration & Draft	Cambridge	623-0202
Cambridge Greens	80 Kinnaird St. Cambridge	547-1707
Cambridge Tenants' Union	1151 Mass Ave. Cambridge	576-1006
Cambridge Economic Opportunity Comm.	11 Inman St. Cambridge	868-2900
Central America Solidarity Ass'n (CASA)	1151 Mass. Ave. Cambridge	492-8699
Clean Water Action Project	186A South Street, Boston	423-5724
Citizen Action	678 Mass. Ave. Cambridge	864-2277
Coalition for Palestinian Rights	P.O. Box 2316, Cambridge	661-9167
Comite El Salvador	1151 Mass. Ave. Cambridge	661-0202
Committee for Responsible Genetics	186A South Street Boston	423-0650
Computer Professionals for Social Resp.	12 Thorpe St. Somerville	666-2777
Conservation Law Foundation	3 Joy St. Boston	742-2540
Council for a Livable World	20 Park Plaza Boston	542-2282
Council for a Nuclear Weapons Freeze	456 Mass. Ave. Cambridge	491-7809
Disarmament Action Network	11 Garden St. Cambridge	491-4280
Greenpeace	139 Main St. Cambridge	576-1650
INFACT (Boycott GE)	25 Huntington Ave Boston	266-7173
Jobs With Peace	76 Summer St. Boston	338-5783
Inst. for Defense and Disarmament Studies	2001 Beacon St. Brookline	734-4216
Institute for Peace and Int'l Security	91 Harvey Street, Cambridge	547-3338
Mass. Citizens for Safe Energy	37 Temple Place, Boston	426-5556
Mass. Fair Share, Inc.	20 East St. Boston	654-9000
MassPIRG	29 Temple St. Boston	292-4800
Mobilization for Survival	11 Garden St. Cambridge	354-0008
National Lawyer's Guild	14 Beacon St. Boston	227-7335
National Organization for Women	971 Comm. Ave. Brighton	782-1056
New England Equity Institute	20 East St. Boston	350-6152
New Jewish Agenda	1572 Mass. Ave #24 Camb.	491-0732
Oxfam America Educational Resources	115 Broadway St., Boston	728-2500
Physicians for Social Responsibility (PSR)	19 Garden St. Cambridge	497-7440
Rainbow Coalition	410A Columbus Ave. Boston	424-1041
Science for the People	897 Main St. Cambridge	547-0370
Technica	121 Tremont St. #311	783-1668
Union of Concerned Scientists	26 Church St. Cambridge	547-5552
Women's Action for Nuclear Disarmament	691 Mass. Ave. Arlington	643-6740

"You cannot simultaneously prevent and prepare for war"
– Albert Einstein

GRADUATE STUDENTS:
Research Advisor Getting You Down?

THE FOLLOWING ARE NOT REQUIRED TO PASS MIT GRADUATE SCHOOL. UNFORTUNATELY, MANY STUDENTS MUST PUT UP WITH THESE PROBLEMS, MAKING THEM DE FACTO REQUIREMENTS.

Pressure to Avoid Participation In Extracurricular Activities

Working Longer Than 40-hour Weeks and Being Rewarded By Having to Spend More Years at MIT

A Requirement to Work on SDI or Military Projects

Research Dominated by Professor's Consulting Interests Rather than Scientific Goals

Being Forced to Work on Projects Not Related to Your Thesis

Changes in Research Direction not Warranted on Scientific Grounds

Sexual Or Racial Harassment

Having to Perform Too Many ILP (Industrial Liason Program) Demos

Bait-and-switch Tactics by Professors

Lack of Participation in Program or Departmental Policy Decisions

Unexplained Funding Cuts

Let's stand up for our rights. Write to SACC, MIT Room W20-401 with your grievance and leave your phone number or call us at 738-5624 The case studies will be used to support a "bill of rights" for graduate students. Your anonymity will be respected.

"Education is the nourishment of the mind, and like bread, the nourishment of the body, should be free."

Tips and Resources for Activists at MIT

I. Communication and Funding:

Organizing is mainly a matter of communicating with people: calling them, talking to them, and getting together to share experiences, learn about issues, and take action. This section describes some of the *technical details* about communicating with other students at MIT. It does not go into *interpersonal factors* which are, perhaps, even more important. Organizing manuals do exist which deal with the other aspects.[20, 65] Ask yourself: how you can inspire other people while remaining sensitive to their concerns — not frantic, overly negative, domineering, or manipulative?

You do not have to be a member of an "official" student group to do organizing. But it does help with reserving rooms, getting funding, and bulletin boards. There may be an existing group whose interests are similar to yours. Many of these groups are listed on page 63-4 of this guide.

Phones: Students in undergraduate dorms or Ashdown can be reached by Dormline numbers, which are 225-xxxx from outside or x5-xxxx from an MIT phone. *If you can't reach a student, you can leave a message* by calling up the dormitory desk of that student and leaving a message. This is a great way of reaching people who are hard to reach.

Interdepartmental Mail: Any student can use Interdepartmental Mail. Just fold something in thirds, write the MIT address (and the word "Interdepartmental" to be official), and it will be delivered in 1-2 days if you leave it in an Interdepartmental Mail box or at a dorm desk. Delivery is faster in the main cluster of building. Mass mailings can be sent the same way. With the proper permission, labels can be obtained from the Registrar. Group large mailings by building and living group to ease delivery. If you are pressed for time, you can deliver your mailing by hand to the mailroom, building 24, basement. It's not that carefully marked, but there is a mail slot there and there are people there in the evenings sorting mail. For fraternities, it's much faster to put the mail in the Fraternity mailboxes in the Campus Activities office on the 5th Floor of the Student Center.

Scheduling Meetings. For regular classrooms, go to the Schedules Office in Person, E19-338, x3-4788. For Student Center Rooms or facilities, go to the Campus Activities Office, 5th Floor of the Student Center. For Dining Service Rooms (Dining Rooms in the Student Center or the Blue Room in Walker), go to the Student Center Dining Manager's Office, 5th Floor, Student Center. For rooms in dormitories, talk to the dorm desk in question. Give people enough time when scheduling meetings! A notice three days in advance, plus posters around the Institute right before the meeting is effective. So is advance knowledge of a meeting (set a date at the previous meeting), plus a reminder phone call 2 days before the meeting.

Activity recognition and funding: To be recognized, a group must file a list of initial members and a constitution with either the Undergraduate Association (x3-2696) or the Graduate Student Council (x3-2195). Once this is done, you should be aware that the UA Finance Board and the Graduate Student Council both have deadlines for budget proposals followed by open hearings where you present your case. They will pay for mailings, meeting announcements, light research activities, showing of films, a speaker (if well organized), and anything else that doesn't seem too "politically partisan." (Of course, the judgement of what is "politically partisan" is a political decision.)

Outside funding: Other ways of funding student activism are soliciting advertisements from local businesses (*the Thistle* does this), selling baked goods or T-shirts, membership dues, and soliciting contributions from sympathetic professors.

Reimbursement for expenses: If you buy something that the UA Finance Board has agreed to pay for, you get reimbursed from the UA by going to the office (W20-401), and getting a white expense form (for account number 10844), attaching your receipt, and getting the signature of the activity chairperson. If you have raised money outside the Finance board, without strings attached (account number 10818), you use a blue expense form instead. To deposit money in your account (let's say you sold some T-Shirts), go to the Cashier's Office in Building 10 during Business Hours, specify the 10818 number and the name of your student organization, and then take the receipt to the UA accountant, Reta Lee, in room W20-401.

Activity Mail Boxes: These consist of folders, located in the Undergraduate Association Office on the left as you enter the door. The Science Action Coordinating Committee and the Coalition Against Apartheid use these folders as the repository for their mail; other groups use other addresses.

Bulletin Boards: are given out to groups who file an application with the Association of Student Activities, located in the UA Office, room W20-401. If you have a bulletin board, you should get someone to make a nice display out of it; people really do read them, especially in the wee hours of the morning.

Project Athena: This miracle of modern technology allows all undergraduates and student activities to obtain an account. There is a student activism discussion list that can be reached by sending mail to "sacc@xx.lcs.mit.edu". Campus groups should not rely on computer mail however; it's so easy to send notices this way that people rarely take computer mail seriously. Computer hackers might pay attention, but will they ever leave their terminals to do something? You should probably contact people the old fashioned way.

II. Activist Techniques

A. How MIT Runs: It is important for us to educate people about this. 37% of MIT's revenues come from Lincoln Labs; 31% come from campus research. Tuition brings in 14%, endowment gifts 8%, scholarship gifts, 3% (p. 14, Treasurer's Report). The campus is run by the President and the Provost, with the Academic Council (consisting of vice presidents and heads of departments) making decisions. All decisions must be acceptable to the MIT Corporation (a group of men mainly, in highly priced suits, who have extensive connections to big corporate America) which must vote on major decisions, and which sets up committees to review MIT issues. MIT policy is largely determined by concerns of money; *little of this* comes from MIT's education function.

B. Organizing a Rally: Rallies are good ways to 1) Educate a good number of people about an issue (if this is the primary purpose, call it a "teach-in" rather than a rally), 2) Find new people "out of the woodwork" that will be interested in becoming activists, 3) Garner attention for an issue by having the rally reported by the Tech, 4) Making people talk about an issue, who otherwise would never be exposed to anything political and would only talk about 6.001. All you need to organize a rally is four people that know enough to speak, and a microphone (though if you have it in Lobby 7, you're better off without a mike because of echos). Then hold a placard painting session (so that photos of your rally will mean something when printed). A rally is most effective if you publish a flyer that introduces people to the issue, piques their interest (or even gets them angry) and prominently displays the time of the rally. If you leaflet this flyer, it will get people to come, and reassure those who can't stay that you are reasonable, normal people.

Rallies are best if most students will tend to agree with you after listening for a while (though by no means do they have to agree with you at the start), and if speakers present meaningful issues that go beyond saying how bad MIT is. Leading many chants helps keep the crowd participating and are empowering for a marching crowd. If you are going to have a well-known speaker (like a professor), or some students are going to give well-prepared speeches, then it makes sense to decide this at least a few days before the rally. If you put their names or the topics of their speeches in the publicity, the event will be taken much more seriously. Remember to circulate a sign-up sheet and *call the people who are interested* to tell them about your next meeting.

C. Petitioning: Gathering petition signatures is an effective way of forcing the MIT administration to respond to demands or proposals, and forcing students to confront an issue (they usually will need an explanation in order to sign). One way to do this is with a Lobby 10 booth. When weather permits, it is even better to gather signatures by having people stand outside Lobby 7 with clipboards, and to have sheets with room for many signatures, plus sheets to give out for people to take back to their labs/dorms. The sheets should list an interdepartmental address where the petition can be returned.

A petition can commit people to some future action which puts more pressure on MIT. For example, people can pledge not to donate money to MIT unless the tenure process is reformed. The statement on a petition need not be as strong as the demands you have; it's more impressive to have 800 people calling for some response by MIT to the demands than having only 100 expressing complete agreement with all the demands. People who sign a simpler statement will follow the issue and probably support stronger language as time passes.

D. Organizing Forums and Discussions: When you want to continue pressure and discussion, forums (especially with professors) get people to talk and sometimes get coverage in the Tech. Forums have the potential to attract lots of people, but because many are so busy it's best to let the campus know at least 10 days in advance! Professors must be lined up that far in advance anyway, and some must be scheduled months in advance. Professors should be invited by phone. Then they will usually ask for some written description of the group, unless they already know about your group. If and when they confirm, send them a letter of confirmation a week before, especially if they were booked far in advance.

E. Direct Outreach: Once you have succeeded in gaining some of the spotlight, it is extremely important to go around to living groups and offices, talking to students and professors directly. This type of organizing allows you to express your full political ideas to people, and more importantly, lets you know where students who are inactive are coming from.

F. Direct Action: The leaders of MIT are very busy, entertaining corporate executives and dealing with one "crisis" after another. Merely presenting good arguments to the leaders of such an institution will not persuade them to give credibility to a *radical agenda* — one which threatens the unequal distribution or concentration of power within the institution. They may pretend to be concerned in a superficial way that actually reinforces the power structure. But if we don't want our ideas to be reworked, coopted, and distorted we must somehow affect (or even disrupt) the activities of the institution, which will force its leaders to make *real* changes in order to restore order.

By disruption, we do not only mean physical disruption (like blockading recruiters, storming corporation meetings, or taking over labs). Most of the control the institution exerts over students and faculty is not physical — it is ideological or psychological. Students and professors "fall into line" because they believe that MIT's stated interests (education and service) are being met, or because they believe that MIT's overriding interests (building endowment, serving corporations and government) are important. A radical organization can challenge this idea by getting students to consider the true facts (about whom MIT serves) and the larger picture (about what is important). If faculty consider the larger picture, many of them will not be able to continue their present lines of investigation in good conscience. Merely getting people to think about what they are doing threatens MIT as an institution, and would require significant changes to restore business as usual.

G. IAP Activities: During January, students are around and they don't have classes. This is the perfect time to get them involved. However, IAP activities require advance planning. The deadline is October 31. This means you must line up faculty participants in mid-October. The forms are available from the Undergraduate Academic Support Office next to Lobby 7. Give your activity a good short title because it will appear in the IAP short listings in January. Even list regular meetings in the IAP guide — it's free publicity.

III. Publicity Methods

Guidelines: There are basically two rules about publicity that people should know.

-Rule 1: People usually won't go to something unless they know someone else who is going.

-Rule 2: Generally, someone won't react to a advertisement for something until they see it 7 times. (They are constantly bombarded, so they need repetition.)

This means that person-to-person contact is the most important asset that any grassroots movement has. The Right Wing can always afford more and bigger posters, since they have more money. Let them spend the money, because massive postering generally doesn't work to get people to do things, unless the postering is so massive that people will have a chance to talk about the event, and decide to go independent of talking to any of the activists putting on the event.

There are gimmicks which can make posters more visible — use your creativity. Also, it's important to put your poster on the Lobby 7 pillars repeatedly — that's the place people look most often. A **hand-made** poster on the day of the event will be read by most people who go by.

Other personal touches include going to House Meetings or getting faculty or students to announce your event in class. If you want to do more than preach to the converted, you'll have to reach non-political people in a very personal way. This also means that posters should try not to preach; it's better to ask provocative questions to avoid polarization and alienation.

A. Creating printed media

Making up a poster: Generally, posters must have three main parts: The headline, the picture, and the copy. The main point here is to avoid unnecessary clutter and to print the headline in large print with a **bold** marker. Even large Macintosh-generated type is not very readable from a distance. If nothing on the poster can be read from 20 feet away, then the poster is ineffective. Pictures or diagrams that provoke the viewer to want to understand them are effective. Don't forget to clearly lay out the time, date, and place of the event.

Copying Posters: For quantities of less than 300, MIT Graphic Arts self service is pretty cheap — 3¢ a page for small quantities, 2¢ for large quantities. It's open 9 to 6 in the Basement of Building 11, from 9 to 5 in the Basement of Building E52, and will soon have a 24-hour branch in the Student Center. You can ask for any type of paper — this includes many different colors, three-holed paper, or thesis bond. It costs an extra penny a page for color, or for longer posters (8 1/2 x 14). 11x17 posters are expensive through MIT – 8¢ each. But you can buy your own colored 11x17 paper and then use the MIT copiers for only 3¢ a page, a real deal. If you want to leave something to be copied, it usually costs a bit more and takes about 24 hours.

Offset Printing: Currently, Gnomon Copy is one of the cheapest offset places, coming in just under 2 cents a page if you have quantities of 1000 or more. Add about a half cent per page for colored paper. Gnomon has stores near MIT and in Harvard Square. For 5,000 or more copies, try Pronto Print in Somerville.

Cutting Posters: LSC has a guillotine which can cut 500 sheets at a time, for 10 cents a cut. This means you can double up two (or more) mini-flyers on a 81/2 x 11" sheet, and then have LSC do the cutting. They're open most of the P.M. hours, but people there don't always know how to use the machine. Generally, give yourself at least 3 hours time for LSC to cut your material. Half-size flyers save money!!

Leafletting: When you want to create the impression that something big is about to happen, it's good to leaflet at the entrance to Lobby 7. It's also good to hit Amherst St. near the Sloan School — especially around lunchtime. One person can usually distribute 250 leaflets in an hour. This means that you need lots of leaflets, and should probably use half-size ones. Leafletting has the advantage that the leaflets are spread all over the Institute after you give them out. Every rally can benefit greatly from leafletting, because it is personal, leading people to have confidence in the event actually taking place. It's best to have at least 3 people leafletting at once for some event coming soon; otherwise, the single person looks lonely, like a salesperson or huckster for some religious group.

Drop Posters: Drop Poster Paper is available from TCA, 4th floor, student center. It costs a few bucks for a 30 foot sheet. Paint is available from APO. It's cheap ——20 cents a foot. You will want to bring some additional brushes; APO brushes are too fat.

Morning Placards: Some SACC rallies have been announced by leaning woodern placards with the message "Rally today, 12:30, Lobby 7 Steps" at 8am on the morning of the rallies. These were not removed by physical plant, and reminded most of the students about previous advertising. One was placed near Baker House, another leaned against Transparent Horizons, and a third was placed on the edge of the plaza between the Student Center and Bexley.

Mimeograph Machines: The cheapest way to copy things in quantity is with a mimeo machine, which can handle about 3000 copies using one stencil. Paper can be purchased from places like Staples on Soldier's Field Road for about $4 per 500 sheets. No MIT organization owns a mimeo machine, but Mobilization for Survival in Harvard Square may let you use theirs for a very small fee.

Stickers: For about 10 cents a page, you can purchase 81/2 x 11" sticker paper at The Paper Store on Melcher Street in Boston. This paper can be placed in a copy machine, and you can create multiple stickers per page. Then use a paper cutter to cut the stickers up! Stickers placed on phone booths, elevator ceilings, water fountains, stairwells, and "MIT-Private Property" decals are difficult to remove.

B. Other forms of media:

Video presentations and speeches: VCR's and 16mm film projectors can be rented from MIT Audio Visual, located in the basement of the Infinite Corridor (4-017). Overhead and slide projectors are also available. Great films can be rented from the American Friends Service Committee Film Library in Cambridge (call in advance); LSC has mainstream film catalogs. The prices for 4 hours/1 day, for different media are:

VCR and TV, $30/40; VCR only, $20/$30; 16mm projector, $10.50/$14; Megaphone, $9.50/ $13.00; Portable P.A. (with microphone) from $12 to $39 depending on size.

When showing a film, ask the Schedules Office for a room with a screen to avoid having to rent one. Some professors and students already have VCR's you can use. Some rooms have TV's. Some people in Senior House and Fenway House have mikes and instrument PA's.

Radical Tactics: A stamp pad and a custom-made stamp (try Sixth Street in Cambridge) facilitates rapid graffiti creation – it's less easy to get caught than with a marker. Chalk can be used by groups of people to write on the cement of the student center, media lab area, and Sloan. This is nondestructive and easy to organize, since there's plenty of chalk at MIT. Use your imagination!

C. Postering Hints

Number of posters needed: If you place them well, 150 posters will let everybody know about an event. 2-3 for the entrances to each dormitory, plus one on the more visible bulletin boards in places all over the Institute (1st and 2nd floors especially), will add up to about 100. Then, the remaining 50 can be used to plaster the pillars and walls each day. Don't forget the Media Lab, building E40, 1st Floor, Building E53, 3rd Floor, the AI Lab (545 Tech Square), the Whitehead Institute, the Student Center, the Humanities Library, and the entrance to MIT across from Amherst St. on Mass Ave as places that will reach large groups of people.

When to poster: Generally, posters are ripped down every few hours on walls in the Infinite Corridor, twice a day on the Lobby 7 pillars, and every couple of days elsewhere. Posters on bulletin boards are often hidden, but they are rarely ripped down. Therefore, it's most effective to poster on bulletin boards at least a week before the event, and follow that up with posters in "short-range" places, such as the walls of the Infinite Corridor, afterwards.

Special Note: The Physical Plant workers go off duty at 3:30. Therefore, posters put up at that time will generally stay up until the graveyard shift arrives at 11pm. If only MIT would set up some kiosks like there are at Harvard, cleared daily, postering would be much easier to do.

D. Free Sources of Publicity

Tech Talk: Will list anything if you give it to them by Friday at noon. The deadline is strict, and the place to go is the News Office in Building 5. The listings are from the subsequent Wednesday to the next Wednesday after that. You can list specific events or just the existence of your group.

Tech Listings: These are unreliable and therefore are not read very carefully. The *Tech* prints them only if they have space. Don't rely on them, but you can make an announcement that will get repeated in several issues just to inform people about your group.

UA News: Each Tuesday, when they have their act together, the UA President puts out a half-page listing of student activity related notices. If you submit a written listing by Friday at 5, it should get in, but it is recommended that you talk to the UA president; otherwise, your note may be ignored.

WMBR: If you give them a public service announcement two weeks in advance, and if it is important, they will probably air it. If they revive their show about MIT affairs, try to appear as a guest.

MIT Cable: Will list on their TV screen, but it isn't too effective.

Computer Mailing Lists: There are mailing lists with messages on Athena, for example, but these don't tend to get people to do anything, because it's so easy to send mass messages that the content of any communication is devalued.

Drop Poster Space: Can be reserved through Jo Buck, Campus Activities, 5th Floor of Student Center, x3-7974 but you must go there in person to do it. Reserve in advance because it's often filled.

Lobby 10 Booth Space: Can be reserved through Jo Buck.

Pillar Posters: A large sheet of computer paper on the Lobby 7 Pillar with a provocative question can get people thinking about some issue you want them to think about. As of last fall, you must inform Steve Burke, the Dictator of Lobby 7, about your poster in advance and belong to a recognized student group.

Chalk Boards: The lecture halls with movable boards can be set up in the early morning with message that students will see in the morning.

E. Publicity for Pay

LSC Slides: These cost $20 for a weekend, last I heard. Are good to reinforce something that's already been advertised elsewhere. Shown on Friday, Saturday, and Sunday movies.

Tech Ads: These are expensive: a few bucks ($3?) per column inch for student groups.

F. Other ways to get your views across

Letters to the Tech: It's important to make your views accessible to people who don't have the time to go to lots of left-wing events. The best way to do this is to write a letter to The Tech. Letters should be concise, and the deadline is 5pm, two days before the issue. This means Sunday at 5pm for Tuesday, and Wednesday at 5 for Friday. More people read the Friday *Tech*, but not many more.

The Tech won't print "free publicity." You can talk about an upcoming event, but if you say when it is, they might edit that out. Left-wing newspapers like *The Thistle* are more effective for really radical stuff and for mobilizing the converted, while the mainstream Tech is better for making the general, obvious points, related to students' everyday lives, that will get them to think politically. When you write to the Tech, expect a right-wing backlash if you don't explain every single assumption. Just be ready for it.

The Thistle: The Thistle, MIT's oldest alternative newspaper, is just over a year old and is going strong. Published by the MIT Alternative News Collective (8 to 15 students and alumni/ae), the paper's goal is to humanize MIT. This year the paper will publish theme issues on Military Domination of Education, Sex, and other issues. You can always send brief letters to the editor; call Steve at x3-1521 to find out when the next meeting is.

The Graduate: This GSC rag used to just write articles worshipping the academic programs of all the graduate departments. Lately, they've been improving, but they still have a way to go.

Hall Tutors: It's good to get materials to undergraduate hall tutors, who have meetings in their respective dorms occasionally. They should be informed about issues so that they can tell students how to find more information.

IV. Information about MIT

A. Information Published by MIT: (Most of these are available in the humanities library, but if an up-to-date version is not there, another place is listed.)

MIT Faculty and Staff Directory: Comes out in November; Appendix at the end lists all Corporation Members, the Executive Committee, Investment Committee, Corp. Standing Committees, Faculty officers, Faculty committees. Copies are available in the mail room (24-007) if you say you have an MIT office.

MIT Report of the Treasurer: Small version lists main budget categories, *fat version* lists detailed budget categories, plus the names of all individual and corporate donors of money to MIT. Comes out in October for the previous Fiscal Year ending on June 30. Jack Currie, 4-110, x3-1424, director of Finance, has some fat ones to give out.

MIT Report on Sponsored Research: Large listing of research contracts, by professor name and by sponsor. Lists dollar amounts, and comes out around January for the previous fiscal year. Most contracts in the book are old by the time the book comes out. Lists dollar totals for Lincoln Lab but not much else. Carol Van Aken, E19-702, Associate Director of Office of Sponsored Programs.

MIT Bulletin: The Corporation members are also listed in the back of the MIT catalog.

MIT Long Range Plan, June 5, 1985. This is periodically updated by the Provost; at the end of Francis Low's "reign" as Provost, the plan was bound and printed. The provost should have more copies, but it is likely that MIT's plans have changed greatly since Mr. Military, John Deutch, became provost.

MIT Report to the President. A compendium of annual reports sent to Paul Gray each year by all the offices at MIT -- good place to find out what went on last year. Also contain's President's annual statement, a good place to find quotes about the "high moral purpose" of MIT. *President's Office.*

MIT Policies and Procedures, June 30, 1986. The Official book of MIT rules and regulations regarding such issues as academic policy, faculty conduct, the purpose of the Institute, etc. Available from the Information Office.

Final Report of the Review Panel on Special Laboratories, 1969. Interim Report of the Lincoln Laboratory Review Committee, February 1986. Report of the Committee on MIT's Military Involvement, May 1986 (In MIT Libraries).

MIT Research Directory. This annual document from the Industrial Liason program has abstraction of all the research MIT offers to corporations who participate in the Liason program. Get it from the ILP office, E38-400, x3-8989.

MIT Factbook. The Planning office prepared this booklet in 1988 so that facts on MIT enrollment, land use, funding, etc. would be handily available to the faculty. It can be obtained from the Planning Office, 12-156, x3-5831.

Department and Laboratory Annual Reports. Available from the Department of Mechanical Engineering and the Research Laboratory of Electronics, among others.

B. Outside Information on MIT

Dorothy Nelkin, *The University and Military Research: Moral Politics at MIT* (out of Print, in Library)
James Ridgeway, *The Closed Corporation*, 1968.
James Killian, *The Education of a College President*
David Noble, *America By Design* and *Forces of Production*
March 4: Students, Scientists, and Society (Transcript of March 4, 1969 SACC event, MIT Press, out of Print)

Defense Electronics and *Aviation Week* for information about military technology. *Science* and *Chronicle of Higher Education* for information on research, university policy, and big meetings.

Q.E.D. Question Educate Democratize

MIT Songs

The Warsketeer's Theme Song

Who's the leader of the labs designing weaponry?
MIT — SDI — leads to World War III.

Provost Deutch has sold us out and joined the DOD,
MIT — SDI — leads to World War III.

Research now — later, war!
Hey Paul Gray — what's the deal?
Why do you want the weapons budget high, high, high, high?

Join us as we raise our voice to stop insanity.
MIT — SDI — leads to World War III.

O Come All Ye Fateful

O Come All Ye Fateful
Needing lots of money
Oh sign up, oh sign up for ROTC.

Be cannon fodder
Work for Schultz and Carlucci
Oh who cares what I'm used for
Who cares what I'm used for
Oh who cares what I'm used for
My tuition's paid!

The Twelve Days of Oliver North

On the first day of Rush Week the government said to me,
Don't worry about World War 3.

On the twelvth day of Rush Week the government said to me,
Don't forget to vote, (12)
We're building fallout shelters, (11)
Piss into this cup, (10)
AIDS victims earned it, (9)
Weapons for Iran, (8)
Bomb Libya, (7)
We lied about the contras, (6)
WE PLEAD THE FIFTH!... (5)
Let's trash SALT II, (4)
Iceland failed, (3)
Star Wars is for peace (2)
And don't worry about World War 3!

Chants for MIT

1,2,3,4, MIT prepares for war.
5,6,7,8, we don't want to radiate.

World War buildup won't go on
If you don't tool for the Pentagon.

MIT, you know — South African stocks
Have got to go!

Paul Gray, you can't hide!
We know you're on Apartheid's side.

Financial Aid Yes,
Contra Aid No!

MIT, Divest Now!

Money for education,
Not for Devastation.

Jack Ruina rakes the cash,
but we just see the blinding flash.

"If you don't like the news, go out and make your own."

– Popular 60's Slogan

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Think Globally; Act Locally

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What is the Boston Student Action Network?

The Boston Student Action Network (BSAN) is a coalition of progressive students and groups in the Boston metropolitan area working to develop a grassroots campus movement. We exist to facilitate the development of action on individual campuses by sharing our experiences, providing each other with personal support, encouraging new activists at schools not currently organized, and occasionally working together to pull off large events.

Students in the network are already involved in issues such as divestment, the environment, tuition hikes, racism, US intervention, student rights, military research, tenure battles, women's rights, corporate control of education, gay rights, gentrification, and homelessness. We recognize that the combined effort of single issue groups results in a piecemeal, fragmented movement that cannot create an alternative to the greed, militarism, irresponsibility, and oppression that plague our society and threaten our very survival. Therefore we advocate an integrative — rather than issue-specialized — approach which empowers people to challenge the forces that rob from us control over our lives. We seek a society dedicated to meeting human needs in harmony with nature, rather than one which serves domination and profit.

We are part of the **Northeast Student Action Network** (NSAN), based in New England and New York, which grew out of the National Student Convention in February 1988 at Rutgers University.

Feel free to call any of outreach contacts listed here:

Steve	M.I.T.	253-1521(w)
Michael	Brandeis	893-2373(h)
J Barr	Mass. College of Art	787-7604(h)
Nancy	Museum School	776-8682(h)
Phil	Tufts University	983-0991(h)
Anne D.	Wellesley College	239-9917(h)

Boston Student Action Network
P.O. Box 1050, Cambridge MA 02142

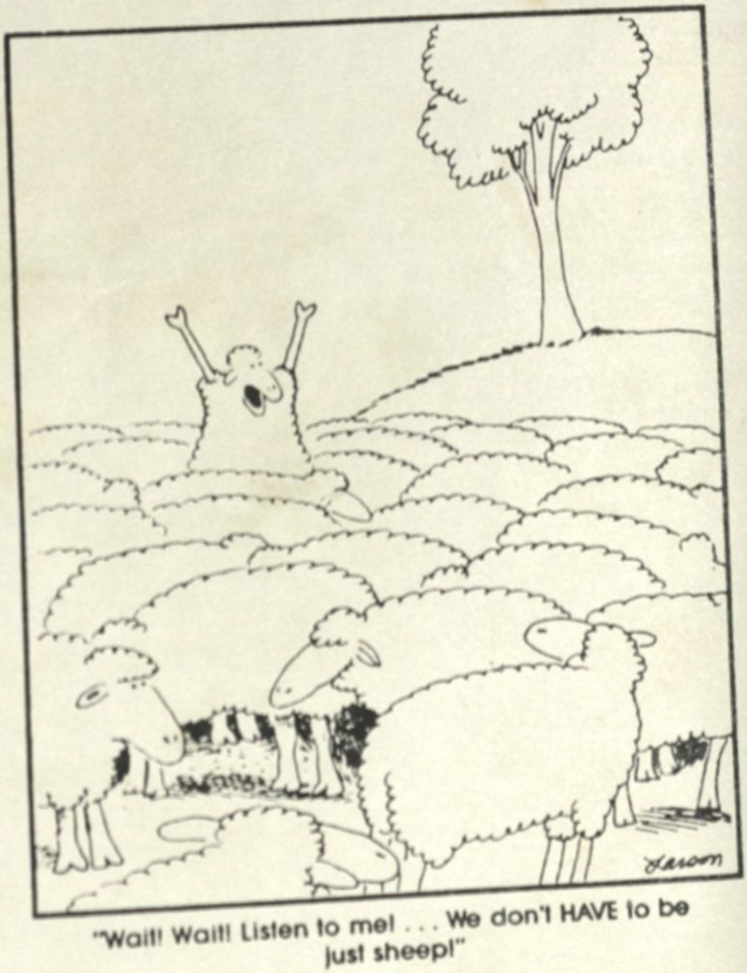
Find the hidden weapons systems MIT has helped to develop!

B	C	Y	U	R	A	T	H	U	N	K	C	Y	O	H	I
M	F	S	R	A	V	F	M	A	L	N	B	T	W	F	U
O	S	E	E	T	U	A	I	K	U	T	M	D	L	E	O
B	D	H	B	E	G	T	D	G	W	E	N	E	S	S	A
R	I	T	M	I	R	U	G	E	I	P	I	I	A	M	P
E	M	O	O	P	U	N	E	N	U	A	U	F	T	B	T
T	P	I	B	H	I	O	T	F	T	R	H	B	H	C	F
S	S	N	H	L	W	K	M	Y	C	O	T	O	X	I	N
U	I	A	T	A	P	N	A	O	N	U	R	I	M	D	K
L	S	A	L	M	E	C	N	R	T	Z	I	E	B	E	M
C	G	I	A	T	S	T	S	R	Z	P	D	B	A	V	R
T	L	V	E	F	A	L	V	Q	P	L	E	M	R	R	P
R	T	E	T	J	A	M	T	U	F	B	N	S	A	I	O
L	P	O	S	E	I	D	O	N	R	A	T	Y	R	M	F

Here are weapon systems to choose from: ATLAS • CLUSTER BOMB • CRUISE • GATLING GUN • GWEN • MIDGETMAN • MIRVED ICBMS • MX • MYCOTOXIN • POSEIDON • SDI • STEALTH BOMBER • TRIDENT

"If there is no struggle, there is no progress. Those who profess to freedom and yet deprecate agitation are men who want crops without plowing. They want rain without thunder and lightning. They want the ocean without the awful roar of its mighty waters. This struggle may be a moral one, or it may be physical, but it must be a struggle. Power concedes nothing without a demand. If never did and it never will."

– Frederick Douglas, 1857



"Wait! Wait! Listen to me! . . . We don't HAVE to be just sheep!"